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ABSTRACT

A well articulated educational program provides students an opportunity to develop to their highest potential without unnecessary duplication of instruction and delay in attaining their educational and career objectives. To provide articulation between North Carolina's public system of elementary, secondary and post secondary schools, the State Board of Education appointed a committee from State Department of Community Colleges and State Department of Public Instruction to cooperate with the Occupational Research Unit in providing leadership in coordinating and implementing articulated programs. Major objectives of the programs were: (1) developing model administrative arrangements, (2) providing articulation of subject matter, (3) promoting innovation and coordination, (4) providing a better total program of occupational education, and (5) providing articulation of handicapped and disadvantaged programs. The report contains examples of programs, evaluations, and suggestions for continuing articulated efforts. A review of research of articulated efforts in the United States, a detailed background of planning, implementing and reporting of articulation efforts in 1970, and a review of articulation efforts in North Carolina prior to 1970 are appended. (AS)

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ARTICULATION BETWEEN NORTH CAROLINA'S PUBLIC SYSTEM OF ELEMENTARY AND SECONDARY SCHOOLS AND PUBLIC SYSTEM OF TECHNICAL INSTITUTES AND COMMUNITY COLLEGES

A Report With Suggestions for Continuing Efforts

by

Fred W. Manley
Assistant Director
OCCUPATIONAL RESEARCH UNIT
Division of Research
State Department of Public Instruction
Raleigh, North Carolina 27602

December 1970

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The Occupational Research Unit is a service agency for North Carolina's public elementary and secondary schools, technical institutes, and community colleges.

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U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
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To Dr. Dan W. Moore, Mr. Jesse S. Clemmons, Mr. Jon E. Jones, Mr. A. J. Bevacqua, Mr. Raymond L. Jefferies, Jr., Dr. Charles J. Law, Jr., Dr. W. Dallas Herring, Dr. I. E. Ready, Dr. Ben E. Fountain, Jr., Dr. Joe R. Clary, and Dr. C. C. Scarborough who greatly assisted in the organization of the contents of the report in order to make it more useful;

To various professional staff in the community colleges, technical institutes, school administrative units, and high schools whose leadership of the 1970 and prior year's articulation efforts and whose suggestions for continuing efforts are reflected in the contents of the report; and

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CONTENTS

PART I. INTRODUCTION 1

Need for Articulation 1
Background of the Report 2

PART II. ARTICULATION EFFORTS DURING 1970 4

Plan I Articulation Programs 4
Plan II Articulation Programs 47
Disadvantaged and Handicapped Articulation Programs 52
Informal Articulation Programs 57
Other Articulation Programs 57
Some Publicity of Articulation Efforts During 1970 62

PART III. EVALUATION OF THE ARTICULATION EFFORTS DURING 1970 . . . 67

PART IV. SUGGESTIONS FOR CONTINUING ARTICULATION EFFORTS 69

APPENDICES 72

Appendix A. Detailed Background of Planning, Implementing, and Reporting of Articulation Efforts During 1970 . . . . A-1

Appendix B. Some Articulation Efforts in North Carolina Prior to 1970 . . . . B-1

Appendix C. A Review of Some Research on Articulation Efforts in the United States C-1

PART I

INTRODUCTION

One of the relatively recent words used differently to enter the jargon of educators is that of "articulation." Although Webster's Seventh New Collegiate Dictionary defines the term in one way as "the action or manner of jointing or interrelating", many educators think of the term as a concept or idea. Other words which are or are almost used synonymously include these: cooperation, coordination, understanding, acquainting, joining, uniting, combining, knowing, and involving. In addition, many view articulation as a process (rather than an event) with varying phases. Moreover, many educators feel that articulation must always be a dynamic re-cycling of sequences or phases that need to occur as changes in people and educational programs take place.

Need for Articulation

The general supervision and administration of both the public elementary-secondary school system and the technical institute-community college system in North Carolina is vested in the State Board of Education. The public school laws of North Carolina state that the public elementary-secondary school system is for persons between the ages of five and 21 years, and to every person 21 years of age, or older, who has not completed a standard high school course of study. The laws state, also, that the public technical institute-community college system is for persons who are high school graduates or who are beyond the compulsory age limit of the elementary-secondary system--16 years--and who have left the elementary-secondary system. The Superintendent and the State Department of Public Instruction provide leadership and carry out the policies of the State Board of Education for the public elementary-secondary system. The Director and the State Department of Community Colleges provide leadership and carry out the policies of the State Board of Education for the public technical institute-community college system.

In both systems of public education are found students, teachers, and various level administrators of academic and occupational education. In both State-level education departments under the State Board of Education are found personnel located in divisions of academic and occupational education. For example, there exists the Division of Occupational Education of the State Department of Public Instruction and the Division of Occupational Education of the State Department of Community Colleges.

Since educational and career development is a process rather than an event and since both systems of public education under the State Board of Education can offer identical and/or similar kinds and levels of instruction, educational programs in both the elementary-secondary system and the technical institute-community college system need to be planned, conducted, and evaluated jointly--not independently. Articulated effort should be a reality in order to provide the continuum of education necessary for each student to develop to his full potential without unnecessary duplication of instruction and delay in attaining his educational and career objectives.

Background of the Report

In early 1970, the State Board of Education put emphasis upon pursuing a policy of attempting to build articulation procedures between secondary and post-secondary institutions. This resulted in joint efforts (conferences, committees, letters, etc.) by the heads and selected staff of the two State-level departments (Public Instruction and Community Colleges) under the State Board of Education, and the following, major actions were taken:

1. Two technical institutes and three community colleges (later to become one technical institute and four community colleges due to the conversion of one of the technical institutes to a community college) were allocated $4,500 each (a total of $22,500) to develop a model educational administrative arrangement between each of themselves and the elementary and secondary school administrative unit(s) being the county in which the technical institute or community college was located. These institutions were (1) Caldwell Community College at Lenoir, (2) Central Piedmont Community College at Charlotte, (3) Sandhills Community College at Southern Pines, (4) Sampson Technical Institute at Clinton, and (5) Wayne Community College at Goldsboro. (Plan I)

   The purpose of the program would be to (1) provide an articulation of subject matter between secondary and post-secondary institutions, (2) promote innovation and coordination in both secondary and post-secondary institutions, and (3) provide a better program of occupational education for all students at either level. A team of individuals would be responsible, during a period of from six weeks to three months, to develop a master plan for occupational education for the programs that exist in the county. The team would make detailed studies of the needs of the (1) communities and (2) students for the need of occupational education at both levels. Additionally, the team would develop proposed curricula for all institutions within the country, seeing to it that articulation took place.

2. A State-level Articulation Committee was formed with three members from the State Department of Community Colleges and two members from the State Department of Public Instruction to provide leadership, coordination, implementation of the action described in "1." above and any other matters relating to articulation programs during the summer of 1970.

3. Any technical institute or community college, upon request of the State Department of Community Colleges, could be authorized to make budget transfers for the purpose of conducting a workshop under the following program guidelines: (1) the overall objective must be that of providing better articulation between the technical institute or community college and the high schools in the technical institute's or community college's service area; (2) the program must be approved by and coordinated with local elementary and secondary school officials; and (3) certificate credit might be earned, in certain cases, if satisfactory arrangements were made with local superintendents. (Plan II)

4. Any technical institute or community college could request up to $2,000 to participate in an articulation program which had no funds in its current budget to use for such a purpose.

5. All technical institutes and community colleges conducting an articulation program during the summer of 1970 were asked by the State Department of Community Colleges to prepare and submit a brief report by September 1, 1970, to the Department using the following outlines: (1) name of institution, (2) purpose of the program, (3) procedures, (4) evaluation, and (5) recommendations.

6. The Occupational Research Unit (ORU) was identified to prepare a report of the current status of articulation between the State's public system of elementary and secondary schools and public system of technical institutes and community colleges with emphasis upon the examination of the reports of the articulation efforts during the summer of 1970. Mr. Fred W. Manley, Assistant Director of the ORU, was selected by the Director of the ORU to assume leadership and responsibility for preparing the report and working very closely with the Chairman of the State-level Articulation Committee, Mr. John H. Blackmon of the State Department of Community Colleges.

7. During August, October, and November 1970, Messrs. Manley and Blackmon visited the leaders of all five Plan I programs, seven Plan II programs, two Disadvantaged and Handicapped programs, and one Other program. (These are discussed in "PART II".)

8. In December, 1970, Mr. Manley submitted multiple copies of the report to Mr. Blackmon.

PART II

ARTICULATION EFFORTS DURING 1970

This section is presented in the following manner: (1) Plan I Articulation Programs, (2) Plan II Articulation Programs, (3) Disadvantaged and Handicapped Articulation Programs, (4) Informal Articulation Programs, and (5) Other Articulation Programs. A tabular summary of the number of each of the five types of programs conducted under the auspices of the 54 public technical institutes and community colleges in North Carolina is given below:

Type of Program	Number of Institutions
(A) Plan I	5
(B) Plan II	30
(C) Disadvantaged and Handicapped	3
(D) Informal	9
(E) Other (including combinations of above)	2
(Institutions not reporting)	(5)

(See the following page for the geographical location of the 54 public technical institutes and community colleges in North Carolina.)

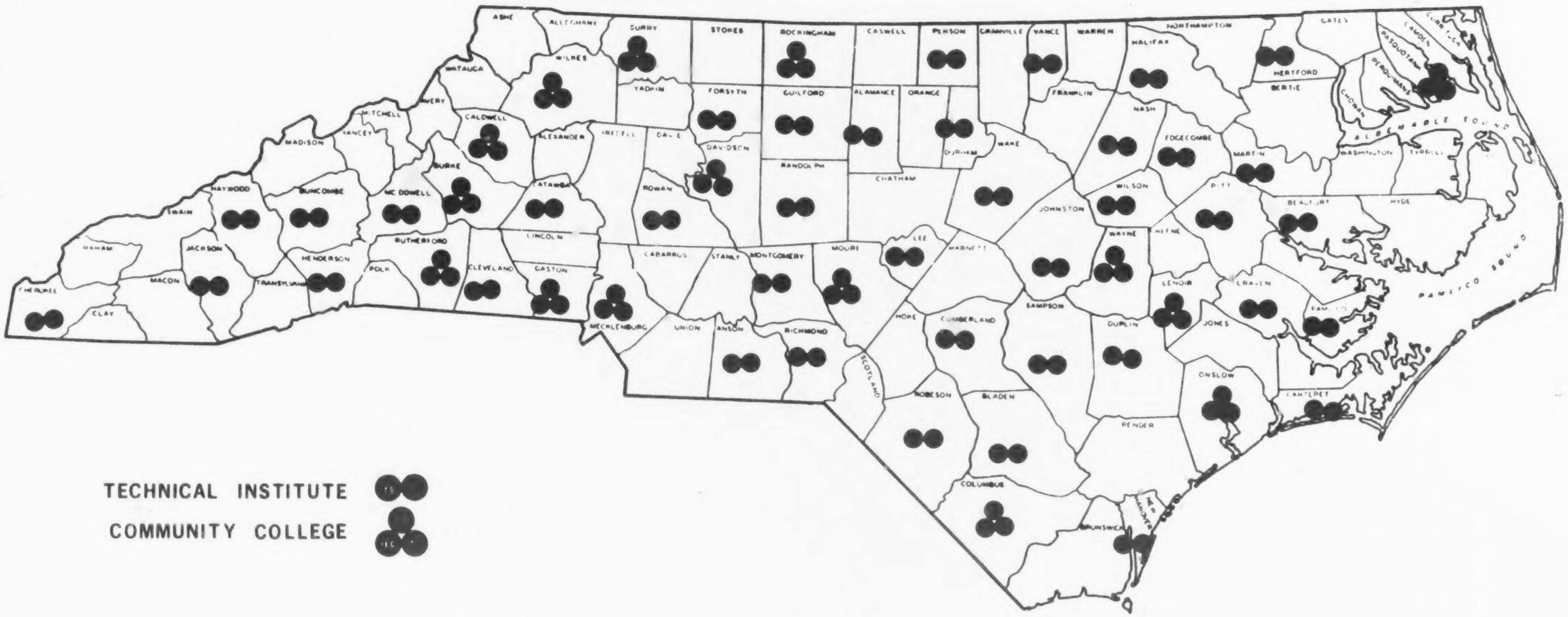
Plan I Articulation Programs

As was stated on page two of this report, one technical institute and four community colleges were allocated $4,500 each to develop a model educational administrative arrangement between each of themselves and the elementary and secondary school administrative unit(s) being in the county in which the technical institute or community college was located.

The purposes of the program were as follows:

(1) To provide an articulation of subject matter between secondary and post-secondary institutions,

NORTH CAROLINA SYSTEM OF INSTITUTIONS



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(2) To promote innovation and coordination in both secondary and post-secondary institutions, and

(3) To provide a better program of occupational education for all students at either level.

Further instructions indicated that a team of individuals would be responsible for accomplishing the following:

(1) To make detailed studies of the needs of the communities and students for occupational education at both levels;

(2) To develop a master plan for occupational education for the programs that existed in the county; and

(3) To develop proposed curricula for all institutions within the county, seeing to it that articulation took place.

In the remaining part of this section, each of the five institutions' reports are digested.

1. Caldwell Community College

A. Name of report: "Business Education Articulation Between Secondary and and Post-Secondary Schools"

B. Agencies involved: (1) Caldwell Community College, (2) Caldwell County School Administrative Unit, and (3) Lenoir City School Administrative Unit

C. Number of people on task force: Six

D. Report content headings: (1) Foreword, (2) Articulation Committee, (3) Table of Contents, (4) Introduction, (5) Shorthand, (6) Typing, (7) Bookkeeping and Accounting, (8) Office Machines, (9) Other Courses, (10) Employment Survey, (11) Personal Rating Sheet, (12) Grading and Evaluation, (13) Joint Advisory Committee, (14) General Clerical Program, (15) Public Relations, (16) In-Service Education, (17) Progress Report, (18) Office Machines List, and (19) Follow-up, 1971

E. Length of report: 52 pages

F. Selected parts of report:

(1) "FOREWORD

The Business Education Articulation Committee for Caldwell County was organized in the early part of 1970. It came into being through the joint efforts of Caldwell Community College and Technical Institute, Caldwell County Board of Education, and Lenoir City Board of Education. The project was coordinated by the Director of Occupational Education of Caldwell Community College and Technical Institute.

The purpose of the committee is to serve as an advisory group representing all phases of Business Education in Caldwell County. The need for such a committee to guide the efforts of Business Education at various levels of instruction and to aid in the communication process has long been apparent.

The members of the committee believe that the most pressing problem in the area of Business Education is communication and coordination between the secondary and post-secondary institutions. Historically, each educational level has formulated its own program with little knowledge or concern for what the others were doing. The committee feels that an understanding between the various levels is necessary if business educators are to do the best possible job in meeting the needs of students.

With these thoughts in mind, a special Articulation Committee was formed. This report is the result of the work of that committee. It is hoped that the suggestions and recommendations found in the following pages will stimulate dialogue between educators on all levels and in all area of Business Education.

CALDWELL COUNTY ARTICULATION COMMITTEE

Toye Allen, Katy Hiatt,
Martha Martin, Lorraine Minton,
Ann Norris, Martha Walsh"

(2) "CALDWELL COUNTY BUSINESS EDUCATION ARTICULATION COMMITTEE

MRS. TOYE ALLEN, Secretarial Science Teacher, Gamewell-Collettsville High School. Caldwell County Board of Education. B.A., Lenoir Rhyne; M.A., Appalachian State University, Business Education.
Experience: 10 years secondary teaching; 5 years secretary.

MRS. KATY G. HIATT, Head of Secretarial Science Department, Lenoir High School, Lenoir City Board of Education. B.S., Business Education and Social Studies, Appalachian State University.
Experience: 7 years secondary teaching.

MRS. MARTHA MARTIN, Head of Business Education Department, Granite Falls High School, Caldwell County Board of Education. B.A., Lenoir Rhyne.
Experience: 14 years secondary teaching.

MRS. LORRAINE MINTON, Instructor Secretarial Science, Caldwell Community College and Technical Institute. B.S. and M.S., Business Education and Economics, Appalachian State University.
Experience: 3 years post-secondary instruction

MRS. ANN NORRIS, Chairman of Business Education Department, Hudson High School, Caldwell County Board of Education. B.S., Appalachian State University.
Experience: 3 years secondary teaching.

MRS. MARTHA D. WALSH, Head of Business Education Department, Hibriten High School, Caldwell County Board of Education. B.S., Business Education, Appalachian State University.
Experience: 17 years secondary teaching; 3 years post-secondary teaching.

Ex-Officio Members:

BILL ARMFIELD, Director of Occupational Education, Caldwell Community College and Technical Institute

H. EDWIN BEAM, President, Caldwell Community College and Technical Institute

ROBERT CADDELL, Principal, Lenoir High School

JAKE HAGAMAN, Superintendent, Lenoir City Schools

C. H. LATHAN, Principal, Hudson High School

CHARLES MCAFEE, Business Education Department Head, Caldwell Community College and Technical Institute

BILL METCALF, Principal, Granite Falls High School

KENNETH ROBERTS, Principal, Hibriten High School

TED WATSON, Principal, Gamewell-Collettsville High School

GENE WHITE, Superintendent, Caldwell County Schools

BRUCE WHITELY, Director, Vocational Education, Caldwell County Schools

Consultant:

BOBBY L. ANDERSON, Assistant Educational Director, College Transfer Division, Department of Community Colleges"

(3) "INTRODUCTION

This report is intended to be a flexible instrument for use in the expansion and improvement of Business Education at the secondary and post-secondary levels in Caldwell County. The report will have served a useful purpose if it stimulates ideas which the individual schools may incorporate in developing and improving their programs in Business Education.

Course patterns in this report suggest possible approaches which may be taken in outlining a program. It is believed that the high schools and the post-secondary institutions will better meet the needs of students if their programs are developed with ample communication and coordination between the two levels. Students should be able to continue their Business Education after secondary training with a minimum amount of repetition and at the same time be able to acquire background material not offered or taken at the secondary level.

Although the committee believed it was desirable to encourage advanced placement at the post-secondary level, a word of caution should be interjected. Certain subjects should be taught at both the secondary and post-secondary level with no advanced placement except by way of course challenge. Business Law would be such a course. The high school should offer this course for the enrichment of the student who terminates formal education with high school graduation and for preparing the college preparatory student to compete more effectively at the post-high school level.

It does not seem feasible to waive repetition in this instance since the collegiate course would most certainly be more comprehensive and would treat the subject matter in greater depth than would the high school course.

It is intended that if the student is able to by-pass certain elementary courses that are normally a part of the post-secondary curriculum, he will have time to specialize in the latter part of his post-secondary study. Advanced placement would give additional time to take specialized courses if the student so desires.

It will be noted that this study is confined to business courses only and does not cover the basic education courses that are an essential part of any curriculum. This should not be construed to imply that the committee does not firmly believe that extensive coverage of such subject matter is most important. Indeed, all members of the committee firmly believe that an understanding of both verbal and mathematical principles is most necessary for success in business.

To reiterate, the committee will feel that this study has served its purpose if it stimulates administrators and instructors to reevaluate their present programs in Business Education and to seek new ways to serve the young people and adults of Caldwell County and North Carolina."

(4) "ARTICULATION COMMITTEE

Final Report

From investigation with high school counselors, faculty, and students of Caldwell Community College, it was evident that educational opportunities in various programs are producing duplication in the transition from secondary education to technical and vocational offerings at the community college. As the high schools continue to add new programs and improve their present programs, it is necessary for higher institutions to co-ordinate their programs with secondary education to eliminate excessive overlapping.

Caldwell Community College proposed to survey, with the help of personnel from secondary education, its technical and vocational programs which are also offered in secondary education.

It was decided to begin the survey with the business education program.

With the approval of the project, Caldwell Community College involved the city and county superintendents, principals, vocational directors, and counselors of the community college in the initial planning stages. The second step was to invite secondary teachers of the business programs, as recommended by the above administrators, to a workshop with instructors of Caldwell Community College for six weeks during the summer months.

The committee was made up of five business teachers who represented each of the high schools in the county and one business faculty representative from Caldwell Community College. The first three meetings were conducted by Bobby L. Anderson, Assistant Educational Director, College Transfer Division, Department of Community Colleges, Raleigh, North Carolina.

Guidelines for the summer workshop included areas of business that the committee would study.

The first was to make a study of the objectives and course outlines of the business courses taught in the high schools and at the community college."

(5) "JOINT ADVISORY COMMITTEE

Following is a report of the Articulation Committee's suggestions for the formation of a joint advisory committee for business education.

Membership.

The Joint-Advisory Committee should be comprised of a high school representative from each school in the county (business departments), business instructors from CCC, business leaders, a representative from principals, a representative from guidance department, Caldwell County Vocational director, and perhaps students to voice opinion.

Business leaders will be chosen from various industries and county wide.

Basic requirements for membership in committee:

Get people who are interested in education and the school systems of Caldwell County.

Duties and responsibilities of the committee:

1. Assist in the development and review of course content to assure its currency in meeting the changing skill and knowledge needed by industry

2. Determine and verify the needs for training
3. Evaluate our programs
4. Provide moral support of secondary and post-secondary education
5. Place students in part-time work during school year or summer vacations
6. Arrange plant or field trip visits for students and instructors
7. Obtain needed school equipment and supplies on loan, as gifts, or at special prices
8. Assist in the establishment of standards of proficiency to be met by students
9. Arrange summer employment for teachers in industry (perhaps with renewal credit)

We feel that approximately 15 members, with six student observers would be a workable committee.

We feel that it would be advantageous to have a chairman (from industry), a co-chairman (from education), and a secretary."

(6) "GUIDELINES FOR FOLLOW-UP

(Summer, 1971 - Articulation Committee)

It is the opinion of the Articulation Committee that several of the areas studied this summer should be re-evaluated and brought up to date next summer. In addition, it is felt that some areas need further study.

I. Evaluation of Placement Test Results

II. Evaluation of One-Year General Clerical Program

III. Evaluation of Joint-Advisory Committee

IV. Comparison of County high school programs in business and the Caldwell Community College business programs.

V. Check to see if there is any increased enrollment at Caldwell Community College due to influence of articulation committee members in their respective schools.

VI. Survey of business opportunities in surrounding communities.

VII. Suggestions for In-Service Workshops.

VIII. Study of the legal secretarial program at Wingate College in order to incorporate some phase of this training into the curriculum at Caldwell Community College.

IX. Interview high school and community college graduates from the business program to help evaluate instruction."

2. Central Piedmont Community College

A. Name of report: "Articulation Committee Report"

B. Agencies involved: (1) Central Piedmont Community College and (2) Charlotte-Mecklenburg School Administrative Unit

C. Number of people on task force: 10

D. Report content headings: (1) The Nature of the Problem, (2) The Nature of Occupational Education as Related to Articulation, (3) Promotion of the Occupational Program, (4) Student Recruitment, (5) Enrollment Cooperation, (6) Staff Relationships and Improvement, (7) Guidance Relationship, (8) Target Area Reports, Conclusions, and Recommendations, and (9) Conclusions, Evaluation, and Needs for Additional Study

E. Length of report: 132 pages

F. Selected parts of report:

(1) "PROPOSALS FOR ARTICULATION

(Trades Area)

Charlotte-Mecklenburg Schools & Central Piedmont Community College

THE LEADERSHIP COMMITTEE

Charlotte-Mecklenburg Schools
Dr. Robert C. Hanes - Chairman - Assistant Superintendent in charge of Secondary Education
Dr. William Self - Superintendent of Charlotte-Mecklenburg Schools
Miss Dorothy Boone - Director of Distributive & Business Education
Clifford Moses - Director of Trade & Industrial Education

Central Piedmont Community College
Dr. Richard Hagemeyer - President, Central Piedmont Community College
Dr. Gayle Simmons - Executive Vice President
Dr. Donald Harbert - Vice President, Career Programs

THE ARTICULATION COMMITTEE

Charlotte-Mecklenburg Schools
Robert O. Doster - Chairman - ICT Coordinator, Garinger High School
Mrs. Ann Hooker - Health Occupations Instructor
East Mecklenburg High School
Douglas French - Drafting Technology Instructor
West Mecklenburg High School
J. W. Kemper - Machine Shop Instructor, Garinger High School
DeWitt Carriker - Guidance Counselor, Garinger High School

Central Piedmont Community College
John G. Bradley - Lead Instructor, Machine Shop
Mrs. Marion Durham - Counselor, Health Related Programs
Alexander Gow - Counselor, Technician & Trade Programs
M. M. Menser - Lead Instructor, Welding
R. S. O'Dell - Lead Instructor, Drafting
John Sauder - Administrative Laison
Administrative Assistant to the Executive Vice President

Report Submitted
July 31, 1970"

(2) "THE NATURE OF THE PROBLEM

The initial meetings of the working committee attempted to determine the extent and scope of study needed within the area of "Articulation." Articulation as defined for the purpose of this study is to join forces for clear and effective transition and continuation of students and programs between the Charlotte-Mecklenburg Schools and Central Piedmont Community College. The target areas of study are Health Occupations, Machine Shop, Welding and Drafting.

The Committee reached agreement within the following areas:

1. It was determined that existing relationships were inadequate and needed to be studied for the purpose of developing functional student transitions from the high school programs to the community college programs.

2. It was concluded that occupational education is possible only when the enrollee has prior mastery of the basic learnings of mathematics and communicative skills. In many cases on both the high school and community college level such mastery was not identifiable, therefore, ways and means for improvement needed to be studied.

3. The Committee concluded that current relationships between the instructional staffs and guidance departments of the two systems were inadequate, and it was concluded that study was needed within the following areas:

Instructor collaboration
Guidance collaboration
Equipment sharing
Curriculum development
Teaching aid development and use

4. The Committee agreed that current public relations programs were inadequate, therefore, concluded that public relations, information distribution, and student recruitment procedures needed to be investigated and methods for improvement developed.

5. It was concluded that articulation would be possible only if the program offerings of the two systems were compatable. Representative members of the committee agreed to attempt to develop realistic course content for both the high school and the community college programs.

The resulting conclusions, recommendations and ideas of the committee are presented in the following content."

(3) "CONCLUSIONS, EVALUATIONS AND NEEDS FOR ADDITIONAL STUDY

The Committee concluded that the study group functioned very well. The lattitude afforded became an asset resulting in the application of creative ideation.

The following content presents conclusions applicable to the implementation of proposed recommendations, educational innovations and additional studies.

Committee Operational Procedures

Based upon the experiences of the Articulation Writing Committee the following recommendations are made:

1. The selection of members for future studies be selected via the following criteria:
    - a. creative thinking and communicative ability
    - b. knowledge of occupational education
    - c. knowledge of target area
    - d. diversity of background experiences
    - e. diversity of background experiences

2. A full-time competent secretary be employed as a member of the Committee. It is suggested that a competent business education teacher would possess both technical skill and educational knowledge and be of valuable assistance.

3. Time schedules of each committee member be evaluated to determine the most functional use of each in terms of employment.

The Advisory Committee

Each CMSS target area in this study should have a functional Advisory Committee composed of represented members from business and industry for the purpose of:

1. Establishing liaison with the comparable CPCC committee.

2. Contributing to articulation between the two institutions and assisting in maintaining compatability between the in-school program and industry.

3. Aiding in the selection and improvement of equipment, materials and supplies.

4. Aiding in the arrangement for field trips which possess educational value.

5. Functioning in the field of public relations as promoters of occupational education.

Promotion of the Occupational Programs

It is recommended that a CMSS instructor employed within the target area be invited to participate in CPCC Advisory Committee proceedings as an active member to encourage liaison and cooperation between area industry and CMSS.

Operational Expenditure Procedure Recommendations

A. Initial Capital Outlay

   1. Adequate initial capital outlay should be provided to properly equip the occupational programs with substantial machines, equipment, and auxiliary devices to enable the offering of a full program.

   2. Continuing Capital outlay should be provided to properly maintain, repair, and replace machines, equipment and auxiliary devices to enable the continuance of a full occupational program.

B. Expendable Material Outlay

Adequate continuing outlay to cover procurement and replacement of perishable tools, safety equipment and raw materials with a life expectancy of one year or less.

Additional Studies

The Committee recommends that additional articulation studies be conducted in identifiable areas by CMSS and CPCC. It further recommends that articulation studies be conducted between CPCC and UNC-C.

It is recommended that study groups be established to develop methods of implementation of proposals presented in this writing and that evaluative media be developed to determine the validity of such proposals.

It is also recommended that study be conducted to determine the validity of presented proposals applicable to all occupational education offerings."

3. Sampson Technical Institute

A. Name of report: "Program of Articulation Between Secondary and Post-Secondary Institutions in Sampson County"

B. Agencies involved: (1) Sampson Technical Institute and (2) Sampson County School Administrative Unit (Clinton City School Administrative Unit was not involved.)

C. Number of people on task force: Six

D. Report content headings: (1) Introduction, (2) Research Findings, (3) Recommendations, (4) Appendix, and (5) Bibliography

E. Length of report: 172 pages

F. Selected parts of report:

(1) "THE ARTICULATION COMMITTEE

Mr. William D. Hudson, Chairman
Mrs. Edna Earle R. Watson
Mr. George W. Tyler
Mrs. Lois F. Denny
Mrs. Darlene H. Warren
Mr. Mitchell M. Oates"

(2) "INTRODUCTION

The Sampson County Administrative Unit of the North Carolina Department of Public Instruction and the Sampson Technical Institute of the Department of Community Colleges participated in Plan I of a program of improved articulation between the two educational systems. The program began June 29, 1970, and terminated August 7, 1970. The purpose of this program was to effectuate a congruence of efforts on the part of the aforementioned systems in their attempts to prepare the young men and women of the county for the world of work.

Sampson County is the largest county in North Carolina, comprising some 964 square miles of land area. The predominate industry is agriculture. Based on the 1960 census count, there were some 47,500 people in the county with a per capita income of $1.575. The 1970 census count was not available at the time of the study.

The trend toward fewer employees on farming units has placed a special burden on this county. More and more of its young people leave each year for industrial employment in surrounding areas. Unfortunately, until recently these young people left with no training to seek jobs.

The Sampson County Schools have instituted programs to remedy this situation. Every high school in the Sampson County Administrative Unit is currently offering one or more vocational education programs, in addition to the regular vocational programs of vocational agriculture and home economics. With 1,634 students enrolled in 15 occupational educational programs, the Sampson County Administrative Units' interest in vocational education is reflected in the figures presented in Appendix A. Also, since Sampson Technical Institute has been in existence much has been done to reverse the trend in this condition. The administrators of the county system recognize the importance of the Institute and feel that a joint cooperative arrangement must be developed to assure the best possible scheme of training for the people of this county.

It is imperative that cooperation and coordination be achieved in order to ensure the proper progression of students through the training stages and that all monies are used wisely and most productively.

A corollary purpose of Plan I would be for this program to serve as a model educational administrative arrangement. The results of the participation of the two educational units, subsequent to proper evaluation, would be disseminated to all units within the Department of Public Instruction and the Department of Community Colleges. The more functional methods and techniques utilized during the conduct of the study could well be emulated by all institutions purporting to teach occupational education. In the event of dysfuctional findings, they would serve to demarcate their undesirability.

The objectives of the program were:

1. To design a vocational education scheme which would allow a student to progress with facility from the exploratory stages through the skills stages of a particular vocation.

2. To establish an effective working relationship of a cooperative and coordinative nature between the administration of the Sampson County School Administrative Unit and the Sampson Technical Institute.

3. To design and carry out an intensive study of the needs of the business, industry, and agriculture communities in Sampson County to ensure that programs in the schools are commensurate with the market needs.

4. To design a master plan for occupational education for all programs under the purview of both institutions.

The sources of these objectives were determined from the active participation of the learner himself, his society and culture, and from subject matter specialists. Needs were identified in similar fashion.

In an attempt to fulfill the objectives as set forth in the proposal, a committee consisting of three employees of the Sampson County Unit of the North Carolina Department of Public Instruction - a principal, a counselor, and an occupational instructor-- and three Sampson Technical Institute staff members were selected for the purpose of developing a comprehensive vocational training scheme for the two units based on the following areas of study:

1. A complete, in-depth study of existing programs in the two systems.

2. A comprehensive survey of jobs in the county labor market area with job descriptions, wage scales, and personnel requirements.

3. The development of curricula data from the job descriptions. Training elements will be identified, courses developed and integrated into curricula.

4. A correlation study to determine programs and course content as it relates to the existing and potential jobs in the labor market of the area.

5. A forecast of training programs to be implemented to meet the needs of the job study. Also, the level of implementation and the progression ladder necessary to reach the skill goal will be suggested.

6. The formulation of a plan for the continued cooperation and coordination between the two systems."

(3) "RESEARCH FINDINGS

The articulation task force was charged with the responsibility of developing a program of better articulation between the two educational systems in Sampson County--the public school system and the technical institute. Prior to the study, there appeared to be a high degree of duplication and replication of programs of occupational education in the secondary and post-secondary institutions of Sampson County. This is not only repetitive but also costly to the taxpayers of the county and State. With increasing demands for the scarce resources, legislators and county commissioners are continually faced with allocating the resources among competing demands. It, therefore, is incumbent upon all educational administrators to enter immediately into a cooperative program designed to evince the most economic, efficient and effective means of providing occupational education opportunities for all students on both levels.

An in-depth study of existing programs was made to determine the degree of duplication and replication of programs of educational occupation and to "design a vocational education scheme which will allow a student to progress with facility from the exploratory stages through the skill stages of a particular vocation."

The study revealed that there is only a small degree of duplication in the existing programs with the exception of Manpower Development Training Act (MDTA) programs which are not permanent programs at Sampson Technical Institute and which are designed for the unemployed or underemployed.

The study also revealed that a majority of the students have little or no background information concerning occupational choices. They are often asked to choose courses of study or make other educational decisions before they are aware of the career opportunities available. Therefore, due to immediate circumstances, most students choose careers for which they have a minimum of appitude or aspiration.

Based on this study, the committee recommends that occupational information should be made available and emphasized as low as level K. At the completion of grade six, the student should be acquainted with most available occupations. At this point, he is prepared to begin "hands-on," pre-vocational, orientational experiences and investigations of the different vocations in the middle school. In grade 9, the student should begin an in-depth study of the major aspects of all vocations, with emphasis on area vocations. By the time a student reaches grade 11 or 12 his mental attitude toward a specific vocation should be developed to a state where he will begin to align and identify himself with a specific area of work. Once this is accomplished, theoretically, he is ready to begin the actual training of a marketable skill in the high school and the technical institute.

It is the belief of the committee that through the implementation of occupational orientation in the education system, the student will be able to perceive himself and his occupational opportunities more accurately and realistically. Consequently, he will be able to choose a career which will be acceptable, satisfying and productive to both himself and to society of which he is a part.

In order to implement the occupational orientation program and to facilitate the progressive flow of study from the exploratory stages through the skill stages of a vocation, numerous innovations and curricula changes must be made in the Sampson County Educational system."

(4) "GENERAL RECOMMENDATIONS

The committee reviewed the curriculum problems and found that the basic reason vocational education was not articulated within grades K-14 was basically because no effort had been made to involve the students totally in this area. It is hereby recommended that in-service workshops be held to acquaint the faculty with the various aspects of vocational education and job opportunities. It is also recommended that an exchange of information between STI and the county unit be implemented immediately. Field trips and visits to STI and other areas of vocational interest should be conducted periodically. Elementary guidance is an essential and important part and the key to the success of the entire program. This guidance should begin at level K.

High school students selecting a chosen vocation in the 11th grade and who accelerate academically could transfer to STI for their 12th grade vocational training. This transfer would be subject to the fact that they pass certain proficiency tests indicating that there is nothing further to be learned on the high school level of a technical nature. These students would continue to receive their related courses such as English, math and science at the high school. These related courses would be geared specifically to meet the needs of their chosen vocation. Therefore, this plan would enable a student to obtain a marketable skill approximately one year earlier than is presently available. It is also recommended that there be programs established at STI to handle those students who academically have nothing further to gain from exposure to difficult related subjects. This type of program would give a concentrated dose of technical information in a specific area."

(5) "SUMMARY

The Articulation Committee agreed to serve without compensation in its original capacity to help facilitate and aid in the establishment of this articulate program. It is suggested that annually or semi-annually all vocational personnel from both systems meet in a workshop-type seminar to discuss ways in which this program might be improved to enable the youth of Sampson County to be more productive citizens. The evaluation of the progress of this program is essential to insure that the goals of the project are met. With the establishment of continued effective working relationships this project can be coordinated into a master plan whereby all programs under this purview will operate congruently."

(6) "RECOMMENDATIONS

A DEVELOPMENTAL OCCUPATIONAL GUIDANCE PROGRAM K-12

The student will progress through sequencial phases in the developmental program of occupational guidance. In order to accomplish the desired goals of the project, the Committee recommended this educational structure for all students:

Level K--Orientation and awareness of the world of work

Grades 1-5--Goals for this formative period will be

--to survey the world of work

--to create an interest in honest work

--to develop a good self-concept

--to learn a respect for all jobs

--to create a willingness to work

--to recognize the importance of all jobs

--to motivate for the world of work

-- to identify potential dropouts

Grade 6--Occupational group guidance

--exploratory experiences

--development of healthy attitudes toward work

--personal appraisal

Grade 7--Occupational group guidance

--introduction to "hands-on" experience

--mixed classes of boys and girls

--self appraisal of interests, aptitudes, abilities

Grade 8--"Hands-on" experience

--shop and laboratory experience in the fields of business, home economics and industrial agriculture shop

--occupational group guidance

Grade 9--Introduction to vocations

- --emphasis on job opportunities in the local area
- --continuation of "hands-on" experiences
- --cycleing of students through all vocational courses for a 2- or 3-week period
- --students return to I. V. class for evaluation and orientation of each vocational area
- --occupational counselor or I.V. teacher conduct vocational group guidance with exchange students
- --these students, in grades 11 and 12, now have an opportunity to study, research, observe, and experience one or two specific jobs with the teacher or counselor serving as a special consultant
- --opportunity for senior job placement
- --counselor or teacher acts as a pivot point for the entire exchange program
- --students obtain experience and first-hand information in all vocational courses

Grade 10--Early vocational courses

- --Home Economics, Agriculture, Business, Disbributive Education
- --Required course in Drafting for all vocational students

Grade 11--Advanced vocational courses

- --Home Economics, Agriculture, Business, Distributive Education, Trades and Industry
- --Required Applied Science (Elementary physics)

Grade 12--Advanced vocational courses continued

- --selected students attend STI part-time

S. T. I.--Post-high school training

--vocational courses

--technical courses"

(7) "GENERAL RECOMMENDATIONS

1. In-service sessions "orientation to occupational information" for all classroom teachers

   --to aid teachers in making their subject area more relevant to the world of work

   --many academic teachers are occupationally uninformed

2. Teachers should develop an awareness of the world of work. They should:

   --stress to students the importance of preparing for the world of work

   --orient the subject area to the world of work

   --encourage students to read and investigate their interest areas for job opportunities

      (a) improving reading level

      (b) learn more about job requirements

3. Sessions of county and STI teachers (K-12)

   --visits to STI

   --field trips to STI

   --teacher exchange program

   --joint curriculum planning

4. Elementary guidance

   1. Elementary counselor, or occupational education director, to orient teachers through in-service workshops or individual assistance.

   2. Initial occupational information K-12

5. Organize the middle school concept in all schools

   Grade 7 - orientation and group guidance

   8 - exploratory and hands-on experience

   9 - introduction to vocations

6. High school students entering STI need:

   a. a general physics background

   b. practical spelling

   c. basic record keeping

   d. English courses geared to vocational-technical training

7. Students transferring to STI in their senior year will take technical courses will be taken at the high school

8. The Articulation Committee will meet periodically without compensation to evaluate the progress of the goals set and to initiate any changes necessary to insure continued articulation of the two systems."

4. Sandhills Community College

A. Name of report: "Project Success -- Services Unique in Community College Education for Secondary Students"

B. Agencies involved: (1) Sandhills Community College and (2) Moore County School Administrative Unit

C. Number of people on task force: Twelve

D. Report content headings: (1) Title page, (2) Foreword, (3) Conclusions and Recommendations by the Articulation Committee, (4) Articulation Committee Membership, (5) Interim Report of the Committee, (6) Recommendations of Study Groups in Brief, and (7) Reports of Departmental Study Groups

E. Length of report: 65 pages

F. Selected parts of report:

(1) "APPENDIX I

Project SUCCESS

Articulation Committee Membership

MEMBER	POSITION	SCHOOL
Mrs. Mildred Anderson	Counselor	Union Pines
Mrs. Iris Burns	Assistant Principal/Teacher	North Moore
Miss Jean Cooper	Student	Sandhills
Dr. LeRoy J. Dare	College Representative	Sandhills
Mr. Charles I. Davis	Teacher Committee Chairman	Pinecrest
Mr. Larry Harward	Teacher	Sandhills
Mr. Larry McNeill	Student	Pinecrest
Mrs. Jane McPhaul	Counselor	Sandhills
Mr. J. E. Pace	Counselor	Sandhills
Mr. Henry I. Rahn, Jr.	Director, Occupational Programs	Sandhills
Mr. L. H. Robinson	High School Supervisor	Moore County Schools
Mr. James Steed	Teacher	Union Pines
Mr. Kirby Watson*	Assistant Superintendent	Moore County Schools

*Mr. Watson was an active participant in the design of the project and in the meetings of the articulation committee. He was not an official member, however."

(2) "PROJECT SUCCESS

(Services Unique in Community College Education for Secondary Students)

FOREWORD

The following is a report of the articulation study activities undertaken by Sandhills Community College and the Moore County Schools as authorized by the Superintendent of Public Instruction and the Director of the Department of Community Colleges. The project design was conceived initially through the cooperative effort of personnel from the community college and the Moore County Schools. The project proposal was submitted to the Department of Public Instruction on April 10, 1970. Once this project was approved and funded, the various actions required to implement it were undertaken.

CONDUCT OF THE STUDY

The project design provided for an articulation committee which has the chief responsibility for carrying out the project. Membership of the committee was selected jointly by representatives of the college and Moore County Schools. A list of committee members is included as Appendix I.

The articulation committee held its first meeting on May 29, 1970, at the Moore County School offices. At this meeting the membership was introduced to the project and preparation was made for getting underway. At the meeting Colonel Charles Davis was elected chairman. Additional planning meetings were held on June 5 and June 11. The chief activity of these meetings was to lay plans for the workshop which had been incorporated in the project design. Personnel from the three high schools in the Moore County system were selected with the intent of giving representation to the various departmental areas within the school curriculum and at the same time representation from the three schools. Counterpart representatives were selected from the community college in order to provide opportunities for articulation, once the workshop studies got underway.

Dates were set for the workshop to include two weeks of meetings. These meetings were held from 1:30-4:30 P.M. each day. The specific dates established were June 15 through 19 and June 22 through 26.

At the first session of the workshop, meeting on June 15, the assembled participants were briefed on the purposes and aspirations of the project. Various persons responsible for leadership in the project were introduced to the participants and then the various study groups within the workshop were allowed to assemble together to make plans for their work that would follow. June 16 was a day devoted to giving the people from the high schools an opportunity to see the physical plant and become acquainted with the various programs offered by the Community College. As they were shown the areas of the college, personnel of the college responsible for the areas were on the scene to provide detailed information about their particular part of the college curriculum.

The remainder of the week was devoted to visiting the three high schools in the County system. These tours were designed to provide all participants in the workshop an opportunity to become acquainted with the physical plants of the high schools and the types of curriculum provided to the students in each. The tours were conducted as follows: June 17, Union Pines High School; June 18, Pinecrest High School; June 19, North Moore High School.

The second week of the workshop activity was devoted entirely to meetings of the departmental study groups. In these groups concentration was given to the examination of the areas in which articulation was currently being carried out; areas where further articulation could be implemented immediately; and the examination of other possibilities related to articulation among the various departments and personnel in similar or allied areas of the curriculum across the board, both from the standpoint of the college and the high schools. At the conclusion of the second week, each departmental study group was asked to produce a summation of its findings and recommendations. These summaries were presented to the articulation committee for further consideration.

The articulation committee met on July 15, July 29 and August 19. At these meetings the reports from the departmental study groups were examined, summarized and prepared for presentation to the President of the College, the Superintendent of Schools and members of the Advisory committee, for condideration and possible implementation.

At its meeting on August 19 the committee approved letters to Dr. Stone and Mr. Lee forwarding a list of recommendations on which it was felt that early action for articulation might be taken by the college and the high schools as applicable. A copy of the letters and recommendations are included in Appendix II.

A complete list of all recommendations made by the committee, stated in brief form, is included in Appendix III. Appendix IV includes the complete reports of the departmental study groups.

In an effort to further enrich the experience of articulation, the committee made efforts to contact the other four groups that had been authorized to conduct similar studies across the state. The chairman of the committee and the committee representative from the college visited with the Sampson Technical Institute group on July 23. The chairman had discussions with the chairman of the Central Piedmont Community College-Charlotte-Mecklenburg group on August 12. These conferences afforded opportunities to exchange views on the subject matter coverage and the techniques for conduct of the articulation study.

AN OUTLOOK TOWARD FURTHER STUDIES

Based on the experience gained from the conduct of this initial study of the area of articulation between the college and secondary levels of the local program of public education, the following listed observations and suggestions are submitted for whatever consideration they may deserve in connection with any such project of a similar nature in the future:

1. Financial deadlines pertaining to this project caused a compression of the time available for planning to the extent of some detrement to its logical implementation and conduct;
2. Additional time for overall planning for such a project should be given in consideration of the necessity for engaging selected school personnel desired for work on the study before they have made other commitments for the summer months - apparently the preferred time for such studies - the time required for planning will depend upon the nature and scope of the projected study and might be as much as three to five months;
3. Consideration might be given to the granting of Renewal Credit to those teachers who need it for their participation in such studies such credit to be in addition to any pay teachers may receive for their work on the study;
4. Valid projects visualized as being possibly worthy of consideration for further study in follow-up of this study effort would be in the nature of In Depth Analysis of selected Departments or specific areas of activity which are of mutual interest to both the college and the secondary levels within the educational program. Related subjects for study of the implications of articulation might possibly include the areas of employment and job opportunities available or projected to become available within geographic limits that would normally attract local residents who graduate from the Moore County High Schools and the Sandhills Community College. This type of study could take the form of a normal industrial-economic-educational-employment survey which would emphasize the types of educational and training programs that would contribute most directly to the developing needs of the surrounding business community. Results of such a study might serve as a valuable guide to the educational system in planning for the program of instruction and training to be offered in the various schools and the college."

(3) "PROJECT SUCCESS

Conclusions and Recommendations of the Articulation Committee

1. The Committee concludes that:
   a. This study, the initial effort of its type for the institutions involved, accomplished the mission which was undertaken in that it brought together for the first time in many cases the teachers and administrators who are responsible for the planning and conduct of the educational programs of the area. The workshop approach to the study permitted the participants to consider together all of the factors influencing problem areas and deficiencies in the current articulation involved and to develop sound recommendations for corrective actions within the areas of the respective departmental study groups.

b. The findings and recommendations reported by the study groups are considered to be based on facts as they were found to exist in the various programs and on logical thinking concerning the importance of articulation in programs of this kind as well as appropriate proposals for improving the articulation effort.

c. The actions being recommended here, if implemented as visualized by the Committee, will represent a good start on the development of a well articulated program of education for the Moore County High Schools and Sandhills Community College toward the assurance of the best possible educational opportunities for the students of the county.

d. The need for improved articulation between the various parts of the programs in the high schools and the community college, as indicated by the findings of this study, is emphasized by the fact that such a significant portion of the enrollment at the college is made up of students who are residents of Moore County. The following listed figures are evidence of this significance:

STUDENTS ENROLLED AT SANDHILLS COMMUNITY COLLEGE EACH FALL FROM MOORE COUNTY

YEAR	MOORE COUNTY		TOTAL ENROLLMENT
	NUMBER	PERCENT OF TOTAL	
1965	180	47	385
1966	254	40	638
1967	301	37	822
1968	309	36	867
1969	379	36	1073

e. Based on the foregoing, and the fact that the original design of the project contemplated an on-going effort after the completion of this initial study, it is considered that a most meaningful improvement in the educational programs of the institutions in the area could result from a well-planned and supervised action which would assure and promote continuous articulation between the two major agencies concerned.

2. In order to provide guidance for the initiation of formal activity to improve articulation as soon as possible, and to serve as a foundation for further productive efforts at better articulated programs in the future, the Committee RECOMMENDS the following actions be taken by the Moore County Schools and the Sandhills Community College:

   a. In the Area of Programs and Curriculum - With the increasing number of graduates of Moore County High Schools attending Sandhills Community College, high school programs should provide opportunity for learning experineces for those students to enter college programs of their choice with the smoothest transition possible.

(1) Specific Actions Recommended (Re. App. III)	(2) Agency Responsible
(a) Planners of programs and curriculum assure proper content of high school courses to assist students in being successful in the college program.	(a) County Schools
(b) High school programs be coordinated with college programs to eliminate the need for wasted effort by students due to gaps or unnecessary duplication in course coverage between high school and college programs.	(b) County and College
(c) High school courses be made consistent as to subject matter coverage between the three high schools.	(c) County Schools
(d) Evaluation and grading of student achievment be made consistent among the three high schools and be as truly reflective as possible of the degree of proficiency attained and students enter the college program at the level of proficiency they actually attained.	(d) County Schools
(e) All high school programs emphasize reading.	(e) County Schools
(f) Appreciation and fundamentals be emphasized in high school Art and Music programs.	(f) County Schools
(g) High school students be permitted to enroll in college courses as stipulated in Appendix II, paragraph IV D of the Enclosure.	(g) College

(h) A program be arranged for the exchange of teachers between the high schools and the college for the enrichment of programs and instruction.	(h) County and College
(i) Proper sequency of courses be established in the three high schools and between the high schools and the college.	(i) County & College
(j) Programs in the high schools be reviewed constantly and designed to meet the needs and desires of students for their further education and training.	(j) County Schools
(k) Health and Hygiene courses and Intramural sports be emphasized in all programs in both the high schools and the college.	(k) County & College

b. In the Area of Instructor Personnel - In order to maximize understanding and coordination toward assuring the most effective instruction, teachers and administrators should become directly involved in the planning and conduct of all programs

(1) Specific Actions Recommended (Re. App. III)	(2) Agency Responsible
(a) Departmental Workshops and Teacher Conferences be held as required to further the consistency and the objectivity in course planning and presentation.	(a) County & College
(b) Expanded In-Service programs and Renewal Credit provisions be arranged for teachers in the area.	(b) County & College
(c) A program for Teacher Exchange be established between the high schools and the college.	(c) County Schools
(d) Efforts be made to have teachers assigned teaching duties within their professional fields only.	(d) County Schools
(e) Occupational-Vocational teachers be permitted to spend official time with business and industry in their fields.	(e) County & College

c. In the Area of Guidance and Student Personnel Activities - Coordination between Sandhills Community College Counselors and High School Guidance personnel should strive for maximum benefits for students.

(1) Specific Actions Recommended (Re. App. III)	(2) Agency Responsible
(a) Early introduction and orientation of students to the implications of higher education beginning with the 6th graders, be effected and high school students be invited to attend College Day at the Sandhills Community College.	(a) College
(b) Simplify and expedite the interview and pre-registration procedure for students enrolling in the college.	(b) College
(c) Improve communication between the high school guidance departments and the college counselors on information about students which is of a confidential nature - personal, background, etc, that would be helpful to college counselors and beneficial to students, in guiding their futures.	(c) County and College
(d) Policies governing the placement of students in college courses be shared by the college counselors and faculty with the guidance personnel in the high schools.	(d) College
(e) High school students, capable and desirous of learning opportunities for advancement in their chosen fields, be permitted to enroll in courses at the college and be given college credit for successful completion of those courses of study.	(e) College
(f) Students entering the college program be enrolled at the level of proficiency they are capable of handling, based on proper tests or other evaluations of their degree of previous achievement.	(f) College
(g) Provision be made for vocational guidance counsel for high school students in the person of a representative from the area of business and industry who can relate to students directly the implications of the world of work.	(g) County, with college coordination

d. In the Area of Public Relations - Involvement of parents and community should be emphasized in all aspects of the educational program.

(1) Specific Actions Recommended (Re. App. III)	(2) Agency Responsible
(a) Open House at the college be held at least annually to attract the people of the county to witness the program being conducted.	(a) College
(b) County-wide Fairs, Contests, Demonstrations, Displays, etc., be held to reflect the accomplishments of programs.	(b) County and College
(c) County-wide publications by the schools such as, Departmental Magazines, and Pamphlets, reflecting program actions.	(c) County and

e. In the Area of Facilities, Equipment and Materials - Optimum utilization of all physical plant and instructional materials should be assured under a program planned and coordinated toward proper use, care and maintenance and supervision of all items available to the entire educational system.

(1) Specific Actions Recommended (Re. App. III)	(2) Agency Responsible
(a) A coordinated plan be developed for the joint utilization and sharing of all of the physical facilities, plant, equipment and materials available to all of the institutions involved - program plans and priorities will need to be determined in order to establish a meaningful approach in this area.	(a) County and College
(b) A plan be developed for the optimum use of the Automatic Data Processing system currently available to the two agencies.	(b) County and College
(c) Study be made, in detail, of the possibility for joint utilization of the Television and related facility currently available at the Pinecrest High School for the benefit of all other facets of the educational programs in the area.	(c) County and College
(d) Pinecrest High School and the Sandhills Community College each be provided with a gymnasium facility on campus.	(d) County and College

f. GENERAL RECOMMENDATIONS:

(1) The foregoing recommendations be considered by the agencies concerned as areas for possible improvement in articulation in the educational program;

(2) Actions to implement these recommendations be taken by the agencies concerned as each considers appropriate in its program;

(3) A mechanism be established by each agency to monitor the progress of actions initiated on the recommendations and report the status of that progress periodically to the agency;

(4) The agencies determine the effect of the actions taken and decide upon the need for further study of the articulation effort in their respective areas of interest; and,

(5) As appropriate, the two agencies involved seek resources to make possible any further study of articulation considered necessary in order to improve their respective parts of the overall program of education for students of Moore County."

(4) "APPENDIX III

PROJECT SUCCESS

Study Group Recommendations in Brief

GENERAL COMMENTS

1. The study groups found that gaps do exist in the articulation between the programs at Sandhills Community College and the High Schools of Moore County. It is believed however that these gaps can be narrowed considerably if not completely closed. Situations were found also which indicated possible areas of unnecessary duplication of effort and of subject matter coverage in the total education program. This duplication can be lessened or eliminated with proper planning and action.

2. Project SUCCESS has afforded an opportunity for concerned persons to meet and discuss present practices and to make worthwhile recommendations toward improved articulation in the overall educational program in the Moore County area. The current programs, their subject matter coverage and the methods and procedures of instruction were analyzed by representatives of the various departments involved and problems and deficiencies identified. These same concerned individuals made recommendations for corrective actions to improve articulation.

3. The project was organized on the premise that the total involvement of every facet of the educational program of the area was necessary in order to realize the desired results. Study groups were formed representing each department in the schools. The participants, through well organized discussion and activities, were provided opportunity for mutual exchange of ideas, strengths and weaknesses in their respective departments as they related each to the other, and to the Sandhills Community College as a community service agency in the field of higher education.

4. Analysis of the reports from the several departmental study groups revealed that they shared mutual problems in the three high schools and that some of the same problems were found to be of interest to both the college and the high schools. Recommendations made by the study groups could be categorized under the following five headings:

A. Program, Curriculum, Course Implications

B. Personnel Matters

C. Guidance Interests

D. Public Relations Aspects

E. Facilities, Equipment and Materials

5. The recommendations which follow are brief statements of the basic corrective actions suggested by the study groups for improving articulation in their respective program areas. The reports of the study groups serve as back-up justification and some explanation for their more detailed recommendations. These reports are included in Appendix IV."

5. Wayne Community College

A. Name of report: "Articulation Study Involving Wayne Community College, Goldsboro City High Schools, and Wayne County High Schools"

B. Agencies involved: (1) Wayne Community College, (2) Wayne County School Administrative Unit, and (3) Goldsboro City School Administrative Unit

C. Number of people on task force: Four

D. Report content headings: (1) Introduction, (2) Presentation and Discussion of Findings, and (3) Recommendations of the Articulation Committee

E. Length of report: 90 pages

F. Selected parts of report:

(1) "ARTICULATION STUDY COMMITTEE

Melvin R. Woodard, Chairman of Articulation Committee
Assistant Principal, Goldsboro Middle School South

Lee Roy Borden, Counselor
Norwayne High School

Harry Cannaday, Chairman of Vocational Education
Southern Wayne High School

Helen D. Lowdermil, Business Education Teacher
Wayne Community College

CONSULTANTS AND ADVISORS

Roger Holloman, Director of Occupational Education
Wayne County Schools

Hal Plonk, Assistant Superintendent
Goldsboro City Schools

E. M. Nicholson, Dean of Academic Affairs
Wayne Community College"

(2) "INTRODUCTION

Occupational education has been a part of secondary and post-secondary education in Wayne County for many years. The county high schools have diversified in their vocational programs in recent years from predominantly agriculture education to a vocational program offering training toward many varied trades.

The Goldsboro Industrial Education Center was established June, 1957, for the purpose of providing vocational-technical education in this area. Today, it is known as Wayne Community College and has an enrollment of more than one thousand full-time students and approximately three thousand part-time students compared to a beginning enrollment of less than fifty students. This fact shows the vast and increased educational needs, particularly in vocational education on both the secondary and post-secondary levels in this area.

These educational needs have been magnified due to the desire of boys and girls to obtain a more specialized education combined with general education. In most cases, this type of education continues through the post-secondary level.

Also, the employment opportunities are greater and more varied due to the increasing industrialization of Wayne County. Job vacancies exist in areas where specific skills are essential. This requirement definitely encourages boys and girls to seek vocational training on the secondary and post-secondary levels.

Statement of the Problem

The aim of this study is to make a comprehensive survey of the occupational educational needs in Wayne County. This study will provide the basis for developing and coordinating an interrelated vocational program beginning on the secondary level and continuing through the post-secondary level.

Objectives of the Study

The objectives of this study are (1) to determine the strengths and weaknesses of the vocational programs now being offered in Wayne County-Goldsboro City Schools and Wayne Community College; (2) to determine the problems encountered by students in the transition from the local high schools to Wayne Community College; (3) to determine the needs in the area of communication between the schools, the college, and the people of Wayne County; (4) to determine present and prospective training needs of the businesses and industries in Wayne County; and (5) to determine the occupational interest of both secondary and post-secondary students in Wayne County.

Procedure, Analyses, and Limitations

Planning for the study involved several meetings of the articulation committee together with Wayne Community College Officials and Occupational Education Directors from the local administrative units. The committee also traveled to Raleigh and sought suggestions and ideas pertaining to the study from officials in the State Department of Community Colleges and the State Department of Public Instruction.

With a thorough knowledge of the correspondence between the State Department of Public Instruction, Dr. Gerald D. James, Superintendent of Public Education in Wayne County, and Clyde A. Erwin, President of Wayne Community College, the committee developed the aims and objectives of the study and made plans for accomplishing them.

Since the study was centered around vocational education on the secondary and post-secondary levels, the committee decided to make a survey of the Goldsboro City and Wayne County High School Seniors, the Goldsboro City and Wayne County Business and Vocational Teachers, Wayne Community College Students having completed at least two quarters and who had graduated from the Goldsboro City or Wayne County High Schools, Wayne Community College Vocational Teachers, and businesses and industries in Wayne County.

Questionnaires for each of the five groups surveyed were developed with the aim of obtaining evaluations and recommendations for improving the present vocational education programs on the secondary and post-secondary levels. Each individual in these groups was mailed a questionnaire accompanied with a cover letter explaining the purpose and significance of his response. Copies of the cover letters and questionnaires can be found in the appendix of this study.

The data obtained from the questionnaires completed and returned was analyzed and categorized in five major areas: (1) High School Seniors, (2) High School Business and Vocational Teachers, (3) College Students, (4) College Vocational Teachers, (5) Businesses and Industries.

These data are exhibited in this report of the study in the form of fifty-eight tables appearing under the appropriate categories. These data are recorded as frequency of occurrence and percentages.

The committee recognizes that certain conditions limit the interpretations and conclusions drawn from the data. Although the committee feels the rate of response was satisfactory for drawing valid conclusions, a higher rate of response would have been more desirable.

The time of year and the lack of time allocated for the study were detrimental to collecting and analyzing the data."

(3) "A SUMMARY OF THE MAJOR FINDINGS IN THE HIGH SCHOOL SENIORS' SURVEY

The Goldsboro City and Wayne County High School Seniors for the 1970-71 School Year were selected to be surveyed. The significance of the following findings from the High School Seniors' Survey to this study is validated by the fact that these students have completed three years of high school work and are presently making post-graduation plans:

1. Most seniors surveyed attended newly consolidated high schools with enrollments in excess of 700 students in grades ten through twelve with the exception of Rosewood High School which has an enrollment in grades nine through twelve of approximately 325 students.

2. The larger high schools offer more diversity as well as more depth in many of the trades taught. The vocational programs in the high schools offer little beyond home economics for girls, with the exception of Aycock and Southern Wayne High Schools.

3. Comparing the vocational students to the business students who responded, it was found that a higher percentage of the business students related the courses in their program to the occupation in which they were interested than did the vocational students. The survey of high school seniors revealed 90.8 percent of the vocational students were boys and 88.6 percent of the business students surveyed were girls.

4. A majority of the students responding rated the effectiveness of the high school programs as good in preparing them for occupations in which they are interested. Of the academic, business, and vocational students, the vocational students seemed to be most impressed with the effectiveness of their program.

5. Both the business and vocational students in the survey indicated that more equipment was the most needed improvement in their programs.

6. Of the business and vocational students surveyed who were interested in attending post-secondary institutions most indicated a desire to attend vocational or business schools. Also, a higher percentage of the business and vocational students were terminating their formal education after graduation than were the academic students.

7. Of the 332 seniors responding a very high percentage indicated their parents influenced them most in making their post-graduation plans.

8. Although the occupational interest were varied and diversified, teaching, secretarial services, and nursing attracted higher percentages of the seniors. A majority of the seniors indicated the main reason for their occupational interests was they felt it was something for which they were best suited.

9. Most of the seniors surveyed would like to live in Wayne County but are not sure if they will.

10. Of the 332 seniors in the survey 35.5 percent are planning to attend Wayne Community College.

11. Of the 118 seniors in the survey planning to attend Wayne Community College, 74.6 percent said they had not visited the college. Of these students, 64.4 percent indicated they had not been encouraged by their high school teachers to attend Wayne Community College.

12. Of the 118 seniors planning to attend Wayne Community College, 56.9 percent selected the college due to proximity and 36.4 percent due to program offerings."

(4) "A SUMMARY OF THE MAJOR FINDINGS IN THE COLLEGE STUDENTS SURVEY

The college students enrolled in a vocational program at Wayne Community College who had attended for at least two quarters and had graduated from a Goldsboro City or Wayne County High School were selected to be surveyed.

The following findings represent the response of fifty-two out of approximately 190 who were selected to be surveyed:

1. Of the fifty-two college students surveyed, 67.3 percent graduated from high school in 1969, and 19.2 percent had graduated from 1965 to 1969.

2. The majority of the college students surveyed had not completed vocational or business programs in high school.

3. Desirable program offerings and proximity were the reasons listed most frequently by the college students surveyed for attending Wayne Community College.

4. Although the highest percentage of college students decided upon the occupation for which they are presently training in high school, a large number decided upon it after graduation but before enrolling at Wayne Community College.

5. The college students surveyed indicated most frequently they became interested in the occupation for which they are preparing because they felt they would enjoy it and could do it well.

6. The majority of the college students surveyed said they were influenced to attend Wayne Community College by either relatives or friends.

7. Forty-seven of the fifty-two college students surveyed indicated that the entire high school program needed improvement to some degree.

8. A higher percentage of the college students had repeated courses in college similar to those taken in high school. Of these students who had repeated courses the majority felt the repetition provided them with a better background."

(5) "A SUMMARY OF THE MAJOR FINDINGS OF THE HIGH SCHOOL BUSINESS AND VOCATIONAL TEACHERS SURVEY

The high school business and vocational teachers surveyed represent approximately thirty percent of the business and vocational teachers in the Goldsboro City and Wayne County High Schools. The evaluations and suggestions of these teachers are significant in that they represent teachers having an average of 8.3 years teaching experience in the area in which they are presently teaching. Each high school in the study was represented.

The major findings relative to this study are:

1. The high school business and vocational teachers overwhelmingly rated the effectiveness of the present business and vocational programs as good but needing improvements.

2. More equipment and more space were listed most frequently by the high school teachers surveyed as the most needed improvements in the high school business and vocational programs.

3. The majority of the high school business teachers indicated that sufficient emphasis was placed on business education in the high schools, while seven of the thirteen vocational teachers felt more emphasis was needed on the vocational program. Also, a higher percentage of the business teachers felt the correlation between the business program and academic program was good compared to a higher percentage of the vocational teachers rating it as only fair.

4. All high school business teachers surveyed felt there should be uniformity in the business programs offered in the Goldsboro City and Wayne County Schools. The high school vocational teachers varied in their opinions concerning uniformity with 30.8 percent in favor of uniformity but 53.8 percent opposed.

5. A higher percentage of the teachers in the Goldsboro City Schools indicated familiarity with the county business and vocational programs than did the county teachers with the city program

6. The business and vocational teachers listed the business program and most of the trade courses as sufficiently preparing some students for immediate employment after graduation from high school.

7. Although a higher percentage of both business and vocational teachers expressed satisfaction with the transition students made from high school to Wayne Community College, more of the vocational teachers expressed dissatisfaction than did the business teachers.

8. About half the high school teachers surveyed indicated that Wayne Community College had provided them with adequate information concerning the various programs offered at the college.

9. Of the high school business and vocational teachers surveyed, 43.5 percent had used Wayne Community College as a resource in providing enrichment for their program.

10. Twenty-one of the twenty-three high school teachers surveyed indicated without hesitation their willingness to meet with the college teachers to plan for better articulation between the secondary and post-secondary programs."

(6) "A SUMMARY OF THE MAJOR FINDINGS OF THE COLLEGE TECHNICAL AND VOCATIONAL TEACHERS SURVEY

Twenty-one technical and vocational teachers at Wayne Community College were included in the study. They were asked to evaluate the college program, the Goldsboro City and Wayne County High Schools, and the college students who had attended these schools. The college teachers were also provided an opportunity to suggest means of improvement.

The evaluations and suggestions derived from this survey are:

1. Of the technical and vocational teachers surveyed, 71.4 percent had taught less than five years at Wayne Community College. Few had taught in the Goldsboro City or the Wayne County High Schools.

2. Of the college teachers surveyed, 71.4 percent rated the technical and vocational programs at Wayne Community College as good but needing improvement. The remaining 28.6 percent rated it as excellent.

3. The college teachers cited facilities and equipment as the most urgently needed improvements.

4. The survey revealed 61.9 percent of the college teachers rated the correlation between the technical or vocational programs and the required academic courses at Wayne Community College as good. The remaining teachers rated the correlation as either fair or excellent.

5. The college teachers in the survey listed math and English most frequently as the areas in which college students were incompetent due to insufficient high school preparation.

6. The college teachers were rather evenly divided as whether or not college students were more successful in vocational programs on the college level after having completed high school vocational courses.

7. Most of the college teachers in the survey felt the high school vocational programs did not train students sufficiently for employment after graduation.

8. The majority of the college teachers responding were not satisfied with student transition from high school vocational programs to corresponding college programs.

9. Of the college teachers surveyed 42.9 percent did not feel the college had an adequate recruiting program and 19 percent were not sure.

10. The majority of the college teachers felt increased emphasis on vocational education was needed in the high schools.

11. Of the college teachers surveyed, 90.5 percent stated they were not kept informed concerning the city and county high school vocational programs.

12. The twenty-one college teachers surveyed unanimously expressed a willingness to work with city and county high school teachers to develop better articulation between the high schools and college."

(7) "A SUMMARY OF THE MAJOR FINDINGS OF THE INDUSTRIAL AND BUSINESS SURVEY

The Industrial and Business Survey was composed of the responses of seventeen employers representing firms located in Wayne County. These firms were representative of the various types of industries and businesses found in Wayne County.

From this survey it was found:

1. Of the personal qualities employers were asked to rate for newly employed personnel, most were rated as good. The ability to lead and vocational-technical training were the only two qualities which received many poor ratings.

2. Attitude toward job, ability to follow instructions, and a general education were the qualities most sought after by the employers surveyed.

3. The main reasons for job turnover were relocation, pregnancy, willingness to work, and inability to get along.

4. Employers rated employees with only a high school education as good or fair in most of the subject areas.

5. All employers surveyed found Wayne Community College cooperative in providing educational training needed for their personnel.

6. Few Wayne Community College graduates had been employed by the employers surveyed. Of those Wayne Community College graduates who had been employed, three were rated excellent, one as good, one as fair, and none as poor.

7. There were 2005 employees in the seventeen businesses and industries surveyed. Of this number 52.8 percent were considered semi-skilled positions. More vacancies also existed in semi-skilled positions. Technical jobs for which there existed a shortage of trained personnel included tool makers, draftsmen, laboratory technicians, and anesthestists. The employment needs for the next five years was expected to increase by 205.

8. The Industrial and Business Survey indicated that most managerial, technical, clerical, and skilled positions required a high school education plus additional training

9. Economics and business operations, farm machinery, construction trades, nurses aides and orderlies, and a cooperative program of work study were areas which employers indicated should be provided by Wayne Community College.

10. Employers recommended more emphasis on vocational-technical education and improved courses in public schools in both oral and written communications."

(8) "RECOMMENDATIONS OF THE ARTICULATION COMMITTEE

This study has yielded sufficient evidence to substantiate the need for developing an interrelated vocational program beginning on the secondary level and continuing through the post-secondary level. The Articulation Committee after spending three months making this study by means of studying the existing vocational programs, the students and teachers involved in these programs, and the businesses and industries employing the graduates of these programs submit two proposals for achieving more effective programs in vocational education on the secondary and post-secondary level as individual high schools, individual administrative units, the college, and cooperatively as a team.

An Effort Be Made by the High Schools, the Administrative Units and the College on an Individual Basis to Utilize This Study in Improving Their Programs in Vocational Education.

The committee would like to emphasize that the purpose of this study was in no way intended to single out any particular high school in either the Goldsboro City or Wayne County Administrative Units, or Wayne Community College and belittle its efforts to provide an effective program in vocational education. Notably, the evaluations submitted by the students, teachers, and employers reveal a sense of dedication to the schools and confidence in the quality of education offered.

The study does provide the individual high schools, individual administrative units, and the college vast opportunities for improving their programs in vocational education. The evaluations and suggestions submitted by students and teachers in the surveys yielded in some cases precise deficiencies and possible solutions, whereas, in other cases further research and study is needed to clearly identify the deficiency and find means for correction.

Although this study did not determine the strengths and weaknesses of the individual schools, the committee feels this study may serve as a model for the individual high schools, the college, or the administrative units in determining its strengths and weaknesses and finding means for maintaining those qualities which are effective, means for improving those qualities which are effective, means for improving or replacing those qualities which are ineffective, and means for implementing new ideas which are founded upon careful research and study.

In order to cooperatively plan an interrelated vocational program ranging from the secondary level through the post-secondary level, each school and administrative unit must first be aware of the needs of the students and its capabilities in providing the necessities in meeting these needs.

An Effort Be Made by the High Schools, the Administrative Units, and the College Cooperatively to Utilize This Study in Planning and Developing an Interrelated Program of Vocational Education.

In order for the Goldsboro City Schools, the Wayne County Schools, and Wayne Community College to proceed with planning and developing better articulation particularly in terms of an interrelated vocational program, it is necessary for a second articulation committee to be organized.

Membership of the Second Articulation Committee

The members of the second articulation committee would be composed of (1) the Director of Vocational and Technical Education at Wayne Community College, (2) the Director of Vocational and Technical Education for the Goldsboro City Schools, (3) the Director of Vocational and Technical Education in the Wayne County Schools, and (4) the Chairman of the Vocational Departments from Goldsboro, Charles B. Aycock, Eastern Wayne, Rosewood, and Southern Wayne High Schools. The chairman of the second articulation committee would be elected at the first meeting.

Meetings of the Second Articulation Committee

This committee would meet at least four times during the 1970-71 school year. The meetings would be held interchangeably at Wayne Community College, the Goldsboro City Schools Administrative Office, and the Wayne County Schools Administrative Office. It is very important that these meetings be held during the school day.

The Purposes of the Second Articulation Committee

The overall purpose of the committee is to develop cooperatively educational programs which will enable the boys and girls of Wayne County to develop fully their potential, particularly in the area of vocational education.

In accomplishing this purpose the committee would:

1. Devise a program in vocational education which would provide those students terminating their education on the high school level adequate training for employment. The scope of this program would be determined by the needs of the students and the capabilities of the high school in providing thorough training for these needs.

2. Devise a vocational program in high school which would offer students courses which would be recognized and accepted by the college in completing the course of study in a particular area. The syllabuses for these courses should be developed cooperatively by those teachers in the college and high school who are responsible for teaching the courses under the supervision of the vocational and technical directors on the high school, college, and state levels.

3. To devise new methods and techniques for accomplishing better communications among Wayne Community College, the Goldsboro City Schools, and the Wayne County Schools.

4. To cooperatively determine the facilities, equipment, and other needs necessary to adequately offer the vocational programs previously mentioned.

5. To plan and organize a workshop in cooperation with the State Department of Public Instruction for high school and college vocational teachers, including the business teachers and high school and college guidance personnel. It is important that teachers receive renewal credit and reasonable stipends for attending the workshop.

The purposes of this workshop would be to (a) to provide the participants an opportunity to become acquainted with each other and the programs offered by the various schools and the college, (b) to acquaint the teachers with the accomplishments and aims of the first and second articulation committees, (c) to supplement and refine the proposed programs devised by the second articulation committee, and (d) to provide teachers with a foundation for implementing the plans and recommendations of the second articulation committee."

Plan II Articulation Programs

As was alluded on page two of this report, 49 technical institutes and community colleges (the difference between the 54 total institutions and the five who were selected to participate in Plan I) had the opportunity to participate in the Plan II Articulation Program. Thirty institutions elected to do this.

Authorization to make budget transfers and/or request up to $2,000 was made available to these institutions to conduct an articulation project under the following guidelines:

(1) The overall objective must be that of providing better articulation between the technical institute or community college and the high schools in the technical institute's or community college's service area;
(2) The program must be approved by and coordinated with local elementary and secondary school officials; and
(3) Certificate credit might be earned, in certain cases, if satisfactory arrangements were made with local school administrative superintendents.

Specific information concerning the Plan II Articulation Programs follow:

A. Total number of programs: 30

B. Number of participants per program: range was approximately 3-150; realistic average was approximately 30

C. Length of programs in days: range was approximately 1-30; realistic average was approximately 5

D. Cost of individual programs: range was approximately $1,000-$17,600; realistic average was approximately $3,800

E. Type of programs: practically all programs took the form of a conference or workshop; the one to approximately five-day programs mainly took the form of conferences where technical institute or community college personnel participated in "get acquainted"-type sessions with personnel of the school administrative unit(s) in the area; the 10 to approximately 15-day programs mainly took the form of conferences-workshops where the programs not only contained the "get acquainted"-type features but involved, in many cases, aspects of the Plan I programs--typical program agendas included orientation sessions, tours of technical institutes and community colleges, speakers from and tours of local community service agencies and business firms (a few programs had technical institute or community college students as speakers or panelists), and actual sessions on joint curriculum development; a number of the 10-day and longer programs awarded certificate renewal credit to the school administrative unit staff; Lenoir Community College and Technical Institute of Alamance involved approximately 150 persons each in their programs; Davidson County Community College's program was directed by a staff member of Appalachian State University, and the participants received graduate credit in guidance from that institution; Southwestern Technical Institute's program was coordinated by a staff member of Western Carolina University, and the actual program was conducted on this campus with the participants receiving either graduate or undergraduate credit in either education or industrial technology; Rockingham Community College conducted a very different type program with high school counselors (This program is described at the end of this section.); and Technical Institute of Alamance, James Sprunt Institute, Southwestern Technical Institute, Wilson County Technical Institute, and Cleveland County Technical Institute engaged in rather extensive efforts of joint curriculum planning with their respective school administrative unit(s).

F. Quoted representative reactions of some participants:

(1) "This has been seemingly the most well-organized conference I have attended in years. I also believe it held the interest of the entire group better than I can hardly imagine with such a mixed group. This conference will prove to be very beneficial to my students in the coming school year."

(2) "I have gained an ability to concretely express the idea that every child who is academically capable of successfully completing a four-year degree in a traditional discipline is not necessarily well suited to this type of education--that this may not be where his interest lies and that his happiness in life, in all probability, is where his interest is. I have realized that the courses offered at ______ are not all for those children that academic teachers have labeled as mentally incompetent in academic disciplines--that many of the courses at _____ would fall into the same level of difficulty as many programs at the four-year prestige colleges. Perhaps a better way to express this would be to say that this conference has succeeded in making the meaning of the word technical clear to those of us who really never understood exactly what was involved--to women who have never actually looked at the separate parts of an electric can opener and wondered where the blade, the lever, the screws, etc., came from or, for that matter, who designed them. Also, the transfer program with _____ has been of particular interest to me due to the kind of people I teach. I now have a complete understanding of the nature of the program and will be better able to guide students as a result of this conference."

(3) "A workshop of this nature would have been worth a year's work in college if this teacher could have had the opportunity twenty years ago. Hopefully, it will not be twenty years before another opportunity of this nature is available and available to all teachers and not just a few."

(4) "First of all, the information in this workshop has been an 'eye-opener' for me. I was unaware of the extensive program offered at this institute...Up to this point, I was able to counsel students only in the academics because this is where I have concentrated my attention...With the information I have now, I feel that I can counsel intelligently many of the students who heretofore have seemed hopeless to me... I believe that I now have enough first-hand knowledge to save many of the boys who are potential dropouts."

(5) "Through this workshop, I now realize many opportunities for high school students that I had not realized before. We have observed a great need for understanding and communication between the student and the teacher."

(6) "I actually found myself looking forward to each session."

(7) "This was very stimulating from every point of view."

(8) "I enjoyed students presenting ideas to us best of all."

(9) "I think I began to realize what it was like to be a high school student again and to remember what was important to me then."

(10) "Boy, this place is sure no dumping ground."

(11) "I knew the names of the programs you offer but I never realized the aptitudes needed to succeed in them."

(12) "You know we hear a lot about the hippie college students, but by golly the students I've worked with here want to learn. I feel better about my students coming here to school."

(13) "You know I've got some students who should be in that program."

(14) "From the campus guard after the Project ended,'We sure need those people here on Saturdays don't we? I guess the word got out about what you were doing, and now I swear I spend all my time telling them there ain't nobody here.'"

(15) "In my opinion, this Articulation Seminar was most worthwhile. It was interesting, as well as informative. I have gained a lot of valuable information that I plan to relate to my students; and I feel this information you gave us should be made known more widely in the public schools and to the general public. Personally, I am impressed with ________; which I was not before. Thank you."

(16) "This was my first visit to ________, and I have been very much impressed. I had no idea that such excellent opportunities were available. You can be sure my students will learn more about it too."

G. Quoted, representative reactions of technical institute and community college administrators:

(1) "From our own observations, the articulation workshop was a tremendous success in as much as it gave us an opportunity to communicate with the people in our secondary school programs. Many of these secondary school people had no idea of the depth and scope which our curriculums entail.

I sincerely recommend that monies be provided to conduct a workshop such as this on an annual basis."

(2) "To make an evaluation of the effectiveness of the program, it has been determined that an increase in enrollment for the next year would mean the program was a success. If future years' enrollments show an upward trend, particularly in the vocational, technical, or business areas, then the program could also be termed at least partically successful. There is no doubt that a great many people are now more familiar with the offerings at the college than was the case previously. This would include those conducting the visits as well as the participants."

(3) "Evaluation: The most meaningful single activity we have ever accomplished to improve our image among public school people."

H. "Project HELP" of Rockingham Community College:

"COLLEGE AND PARTICIPANTS

Rockingham Community College
Wentworth, North Carolina
- Dr. Gerald B. James, President
- Dr. W. B. Howsmon, Jr., Dean of Instruction
- Dr. G. W. Bray, Director of Student Arrairs
- Mr. Wayne Dillon, Admissions Counselor
- Mrs. Marilyn Pergerson, Admissions Counselor
- Mrs. Emily Rothrock, Counselor
- Mr. Jack Garber, Counselor
- Mr. Monroe McVey, Financial Aid and Placement Officer

PUBLIC SCHOOL ADMINISTRATIVE UNITS AND PARTICIPANTS

Rockingham County Schools
- Mrs. Lynette Owens, Counselor
- Ruffin High School

Reidsville City Schools
- Miss Anne Wootton, Counselor
- Miss Nancy McCall, Counselor
- Reidsville Senior High School

Madison-Mayodan City Schools
- Mrs. Margaret Joyce, Counselor
- Madison-Mayodan Senior High School

Eden City Schools
- Miss Faye Roberts, Counselor
- Mr. Kent Richardson, Counselor
- Morehead High School
- Mrs. Sarah Stultz, Counselor
- Holmes Jr. High School

PURPOSE

General - To help make the transition from high school to college smooth and realistic, especially for the educational disadvantaged student.

Specific

1. To acquaint high school counselors with the educational opportunities afforded by the college.
2. To acquaint high school counselors with the demands made upon students by the various educational programs offered by the college.
3. To acquaint high school counselors with admissions and financial aid policies and procedures.
4. To give high school counselors "hands on" experience with the admissions, counseling, and placement process at the college.
5. To aid in the accomplishment of the admissions and placement process for the 1970-71 freshman class, especially the educationally disadvantaged.

PROCEDURES

1. Initial Contact--The President and Director of Student Affairs visited each of the four school superintendents, explained the concept and purposes of the project and asked permission to contact the local school personnel. Local school personnel were contacted by the Admissions Counselor, the project explained and an invitation to participate was issued.
2. Orientation--A seven hour orientation session was held with all participants present on a Saturday in mid-May. The purpose of this session was to provide the information needed to enable the public school counselors to begin working evenings and Saturdays under the supervision and with the help of college personnel.
3. Work Setting--Schedules were arranged whereby from two to four public school counselors worked in the college Student Affairs Office Monday through Thursday evenings from six to ten p.m. and on Saturdays from eight a.m. to two p.m. A regular RCC Student Affairs Staff member was present during these hours to answer questions, administer necessary tests and be of general assistance.

   Project Help counselors were assigned students by alphabet, i.e., Counselor X was assigned all students whose last names began with A through D. It was the counselor's responsibility to contact the student and arrange an appointment. Local students were generally contacted by telephone. Where long distance calls would have been necessary, letters were written. A form letter was devised for this purpose and as counselors made the appointment lists the college clerical staff mailed the letters the following morning.

   Project Help counselors were instructed to concentrate on the educationally disadvantaged students as identified by tests scores and high school transcripts. The general routine was to interpret test data already on hand to each student, administer and interpret additional tests and interest inventories as needed, give the student a statement of his probability of success in the education program of his choice, assist him in making a decision as to program of study, talk with parents as necessary and desirable, provide the student with information about his next steip in accomplishing enrollment, and advise him concerning financial assistance as needed.

EVALUATION

Specific

1. Seven out of eleven public school counselors in Rockingham County Administrative Units participated.
2. Approximately three-fourths of the students contacted responded by meeting their appointment. Of these who did not meet their appointment many informed the counselor of plans to attend RCC in the fall.
3. A considerable number of students changed their program of study.
4. Enrollment in Guided Studies courses during the summer session increased over a year ago.
5. Counselors worked for a toal of 447 man hours at a total cost of $2,680.50 and saw approximately 300 individual students.
6. As a result of this project the college has approached its goal of an admissions interview with each entering student to a greater extent than ever before."

Disadvantaged and Handicapped Articulation Programs

At least three articulation-type programs were conducted with funds available under the Vocational Education Amendments of 1968 Act. (Other such type funded programs might have been listed under other categories in this report.)

Each of these three programs merit some attention, and selected portions of these reports are given in the remaining part of this section.

1. Robeson Technical Institute

"SUMMER OUTREACH PROGRAM

Robeson Technical Institute received approval and $25,000 from set-aside funds for a summer outreach program, which began June 9, 1970, and ended August 7, 1970.

The specific role of this program was to accomplish the following purposes:

1. To purposely seek and recruit, through an intensive effort, those individuals who are 18 years of age and older, and who are disadvantaged and/or handicapped
2. To provide information concerning further vocational training
3. To provide counseling and testing services
4. To actively seek avenues of student financial aid
5. To obtain scholarships and grants from local businesses, industry, civic groups and individuals

6. To obtain the aid of any agencies that may be of assistance to these prospective students

And objective evaluation of the program shows that 762 prospective students were contacted, involving 1,088 visits, and approximately 2,143 other persons were informed of the educational opportunities in the Community College System. It was the concensus of the group that the first week spent in orientation at the school was most valuable in their complete understanding of the philosophy and purposes of the Community College System and of the many educational services offered. They were amazed at how little they really knew at the beginning, and highly recommended an articulation program for others, especially local high school counselors. One of the long-range benefits is the fact that these counselors. One of the long-range benefits is the fact that these counselors are sold on the Community College System, and they will continue to be of tremendous help in our articulation with the public.

One of these nine counselors (a lady) was designated Financial Aid Officer and spent the entire two months actively seeking scholarship aid for needy students. As of September 15, 1970, a total of $7,120.00 has been donated to the scholarship fund from local businesses, industry, and interested individuals, with promises of more scholarship aid later in the year from others. Approximately 150 visits were involved. Reports of the Financial Aid Officer show very strong supoort of Robeson Tech by the people in the area. Contacts made greatly enhance the articulation with business, industries, and individuals.

Random comments from counselors' evaluation of the program:

"This outreach program has a 'grapevine' effect--provide information to a student or an interested adult, and most likely he tells someone else."

"The week of orientation gave me an inside view of Robeson Tech. Like a salesman, one has to know and believe in his product in order to sell it. I am sold on the Community College System and I could talk sincerely on its merits."

"We were able to reach students who had no intentions of going to any institution. Many did not know that there were agencies that could help financial problems."

"Having us work in the areas that we were familiar with made it easier to find prospects."

"Personal contact, visiting in the home and talking with the student and parent, is even more important than I realized."

"It is heart-warming to find help for those who do not know that help is available. I was very surprised that so many were not even aware of such agencies as vocational rehabilitation, and even social security."

Other factors are involved, but I firmly believe that this summer outreach program was a direct influence on the jump in enrollment this year in the curriculum programs and the Learning Laboratory. I believe we shall see an increase in enrollment in other areas as the year progresses. Future planning definitely includes emphasis on specific articulation programs in order to continue the good work accomplished this past summer."

2. College of The Albermarle

"INTRODUCTION

A two-month Articulation Improvement Project was conducted by the College of The Albermarle in order to modify its occupational programs in keeping with the level of preparedness of entering students and to improve personnel articulation.

A great degree of difference between some of the counties in relation to the development of the occupationally oriented programs of study was found in the students attending College of The Albermarle. As a result of the diversity of county programs, the students entering the College have a wide disparity of preparedness for, and expectations from, the occupational programs of the College.

Two occupationally related teachers from each of the seven counties served by the College of The Albermarle were employed to study the secondary and the College curricula. The purpose of the project was to identify areas of poor articulation. A report of the finds was to be submitted to the College and high schools with recommendations for curricula modifications to eliminate or to reduce articulation problems.

To accomplish our objectives, information was obtained through the following means:

- Speakers
- Field trips to high schools and College occupational departments
- Group discussions
- Employment Security Commission
- Periodicals
- High Schools' syllabi (studied and updated)
- College syllabi
- Statistical data compiled by College of The Albermarle and State Department
- Interviews with businessmen in the seven-county area
- Superintendents
- Principals
- Guidance Counselors
- College of The Albermarle Staff

OBJECTIVES

In order to achieve the goal of improving articulation between the occupational education programs of the College of The Albermarle and the secondary schools of the seven-county area, we, the members of the Occupational Research Staff, do hereby set forth the following objectives:

1. To survey the seven-county area to detemrine the extent of the need for occupationally trained students.
2. To further acquaint administrators, other school personnel, county officials, and citizens with the field of occupational studies and the role it has in the community development.
3. To determine what each school system in the seven-county area has in the area of occupationally related studies.
4. To determine what College of The Albermarle has in the area of occupationally related studies.

5. To determine local and state sources of financial support for each school system in the seven-county area.
6. To determine what each school system could have through full utilization of its current resources.
7. To recommend new programs that College of The Albermarle could have in the future.
8. To recommend improvements in the occupational programs for the school systems in the seven-county area.
9. To make recommendations to guide College of The Albermarle in working with each system to develop occupational program that will articulate well with the programs recommended for each system.
10. To make recommendations that will help College of The Albemarle to articulate well with all the public school systems in general.

ARTICULATION

The programs of the College of The Albermarle are more adequate to meet the needs of the seven-county area secondary schools than the public realizes. However, after an extensive study by this committee, it is recognized that better articulation is necessary to maintain a continuous and smooth flow of learning from the high schools to the college. To help eliminate poor articulation, recommendations have been prepared to coordinate the activities between the secondary schools and the College of The Albermarle.

Perhaps the biggest problem facing the entire seven-county area is the wide range of differences in the programs offered in each school. Some schools offer an extensive occupational program while many schools do not. In view of the number of grades completed by the adult population, the critical dropout rate, and the small number of students going to four-year institutions, it must be assumed that more students would be interested in school if there were a program tailored to their needs and wishes. We feel that a strengthening of all phases of occupational instruction is part of the answer to this problem. Perhaps the possibility exists of establishing a joint program with the secondary school administrations and the College of The Albermarle to offer a regional vocation school or some other venture. In some cases, students have had vocational courses in high school which tend to overlap programs offered at the College of The Albermarle. These students take the same courses and start at the same level as students who have not had these subjects in high school. The College must devise some system which will start the student at the level where his high school training terminates. Perhaps something in the area of placement tests, occupational transcripts, etc. can be utilized.

There is a definite need to improve public relations and to make the student population aware of the diversity of programs at the College of The Albermarle. To aid the College of The Albermarle in this venture, we feel that an advisory board made up of college and secondary administration, college and secondary teachers, area businessmen, and concerned citizens should be established. In addition, broad recommendations have been drawn up by the Articulation Committee.

SUMMARY

As a result of the investigation made by the Articulation Improvement Project Research Staff, recommendations have been made in order to create a smoother transition between the students leaving the secondary schools and attending College of The Albermarle. Although the Staff realizes all of the recommendations cannot be put into effect in the immediate future, they may serve as guidelines to achieve this transition.

Since the diversity of county programs was found to be so extensive, the Staff believes a continued detailed study is necessary to promote consistency in articulation between College of The Albermarle and the occupationally related programs in the secondary schools.

The Staff recognized that the College of The Albermarle and its programs of instruction were not as familiar to outsiders as it should be. We felt that this lack of knowledge was detrimental to the College and contributed to articulation problems. Therefore, a decision was made to produce a film and make recommendations in the area of public relations in an effort to promote the College of The Albermarle and reduce articulation problems."

3. Pitt Technical Institute

PURPOSE OF THE PROGRAM:

1. To provide a follow-up program on applications already received at the Institute in an effort to insure a higher percentage of registrants.
2. To make additional contacts with public schools graduates who had not definitely made educational plans.
3. To make initial contacts with prospective applicants.

PROCEDURES: In the summer of 1970 Pitt Technical Institute employed eight secondary school counselors whose primary purpose was to reach into the economically and culturally disadvantaged communities and tell to as many high school graduates and other adults what Pitt Tech had to offer. After a period of orientation about the Institute and also about the task at hand, each counselor was given a specific area of Pitt County to work. Their assignments were: (1) to visit students who had already applied for admission thereby providing additional personal contact; (2) to make additional contacts with graduates who had not finalized their plans beyond high school; (3) to make initial contacts with new citizens in a community.

EVALUATION: The program was rated as successful, particularly for the following reasons:

1. Day student enrollment reached an all time high.
2. Every curriculum experienced an increase in enrollment
3. A higher percent of applicants registered than in previous years.
4. More students asked for financial aid which indicates that the economically disadvantaged were more effectively reached.

RECOMMENDATIONS: It is definitely recommended that other institutions implement a similar program. With it special needs funds, Pitt Tech plans to carry on this program again in the summer of 1971."

Informal Articulation Programs

Nine technical institutes and community colleges submitted reports on articulation efforts during 1970, however, these indicated that "informal"-type efforts had been carried out in lieu of formal-type programs dealing specifically with improved articulation.

It is pointed out that although a number of these institutions were rather young in existence, a number were relatively old, and some had previously carried out articulation-type activities of a formal nature that were similar to those others discussed in this part of the report. Additionally, one of these institutions is referred to in Appendix B, "Some Articulation Efforts in North Carolina Prior to 1970."

Other Articulation Programs

Two institutions rendered reports which did not easily fall into the four categories which have been discussed in this part of the report.

The first, Forsyth Technical Institute, indicated a combination of efforts during 1970. These were (Note the last effort.):

"1. Faculty members have been encouraged to maintain close contact with the instructors in similar programs in the public schools. An example of this is our Data Processing program. These folks have worked together to point where we will accept an advanced standards students who have had some programming instruction in the high school.
2. The Board of Trustees recently amended its policy on granting of credit whereby a student may receive consideration for work taken in another institution.
3. Under disadvantaged and handicapped funds, we have two people working directly with the community agencies, for the purpose of recruiting students in the programs. One of those agencies is the public school. These two folks get out and work with the counselors in each of the high schools in Forsyth County.
4. Counselor orientation sessions have been held for all Guidance Counselors in Winston-Salem/Forsyth County Schools. This orientation program is directed toward providing articulation between the public schools and Forsyth Technical Institute.
5. The counseling staff of Forsyth Technical Institute has been reorganized to provide what we call a Satellite Counseling concept. This means that one counselor will be directed to a given school or schools to provide the link between Forsyth Technical Institute and those schools."

The second, Isothermal Community College, reported in detail their efforts which were initiated during the fall of 1969 and culminated around mid-spring of 1970.

The following part of their report is given with the major objective of indicating to relatively new technical institutes, primarily, of what one institution did on a budget of approximately $350. It is an example of detailed planning, relationship building, and establishing rapport with elementary and secondary schools with the all-important by-word being "don't offend anyone in any way."

> "Shortly after a fall quarter registration that produced discouraging results for the vocational instructors, a meeting was held to determine if every instructor would be willing to give some extea time and effort if a workable plan for securing more and higher caliber students could be formulated. Every instructor agreed to work hard and long if such a plan could be devised. It was agreed, also, that help from the entire staff and faculty would be needed for such a venture to be successful. The Dean of the College and Director of Occupational Education were asked for their support and leadership. It being enthusiastically given, the history of the "Occupational Educational Task Force" follows:
>
> I. The Task Force
>
> The Dean of the College called a meeting only a few days later, consisting of the following: Director of Occupational Education, The Dean of Students, the college Registrar, the college Guidance Counselor, and all the instructors of Occupational Education, both Technical and Vocational. The Dean of the College presided as chairman. This first meeting consisted of the following decisions:
>
> 1. That the group would be known as "The Occupational Education Task Force."
> 2. To meet one afternoon per week until a plan of action was finalized, tried and proven.
> 3. To ask the supervisor of Occupational Education of the local Board of Education to join the group to act as liaison between the college and the public schools. He was asked the following day and became a valuable part of the Task Force.
> 4. To request a sum of money to be placed in a task force budget.
> 5. To make written notations of any ideas that came to mind within the next week. At the next meeting all of the ideas would be discussed and evaluated.
>
> The Task Force met for three (3) consecutive weeks after the first meeting working with the dozens of ideas that were submitted. So many of them were so good it became a matter of deleting rather than choosing. From these meetings a plan of action was agreed upon, committees were chosen, and a budget sum was requested. The budget was approved immediately.
>
> II. The Action
>
> There are six senior high schools in the area served by this community college with which the Task Force was to work. Two instructors from the Technical and Vocational department were selected as a team to represent the college and work within each of these schools. These representatives

were carefully chosen for the specific school within which they were to work. Knowing some of the teachers and/or the principal would be a great advantage.

Within a matter of days every high school in the area had been visited by its respective team. The approach was the same in all schools, as planned, varying only as individuals varied. The visitation was carried out as follows:

1. The School Principal: The principal of each school was contacted first. He was told of the plan and purpose of the Task Force, the part each team would play within his school, and he was asked if he had any objections. It was a joy to the entire Task Force when it was reported that every principal, as well as every teacher, warmly welcomed the teams into their school. This was the most feared hurdle facing the teams. Now, every member of the force felt an air of confidence in carrying out the rest of the plan.
2. The Department Chairman: The principal was asked by the team if they could meet with the Occupational Education Department Chairman for a few minutes. The members of the team readily assured him that no classes would be interrupted. In almost every school the principal escorted the team to the Chairman and made necessary introductions. Here, only part of the plan was divulged. The Chairman of the department was told that the purpose of the Task Force was for bettering relationships and communications between members of both school faculties. They were asked if they though the other teachers would join the college teachers some evening for dinner and an informal get-together. The reaction from this question drew a resounding "yes". Another important part of the plan carried out here by the visiting team was not to disrupt classes by visiting the teachers during class periods. In addition, the team was careful not to hold the teachers in long conversation after school let out, preventing them from going home or doing other work.
3. The Names and Addresses: This visit provided the members of the Task Force with another valuable tool. The names and addresses of every occupational education teacher in the school were secured. Using this list, a personal letter of invitation was mailed to the home of each teacher. The invitation was to an informal steak dinner to be held on campus. Each school was invited to attend on a different evening in order to keep the group small and more informal. It was the belief that as small a ratio of college personnel to high school teachers as possible would lend a more personal atmosphere to the meeting. This proved to be true.
4. The Dinner: Each evening the dinners were held, the Task Force arrived early to set up tables in the Technical-Vocational classroom building. The meal itself was catered permitting the entire Task Force to be free to welcome the guests as they arrived. The attendance

of the principals and teachers to these dinners was almost one hundred percent of those invited.

There were no speeches before or after the meals. The President or the Dean gave a few words of welcome after which the Dean introduced the college personnel. A brief explanation of the purpose of the meeting was given by the Director of Occupational Education. The point he tried to stress were:

a. The percentages and statistics concerning college and non-college graduates.
b. Comments relative to the follow-ups on former students that are annually conducted.
c. The concern of the college for the 80 percent of the students no attending college. The teachers were asked for their ideas and help in trying to reach these people.

5. The Tour: Following the meal meeting, the Task Force lead the group on a tour of the campus. The main emphasis of the tour was on the Occupational Education laboratories. In each of the labs, the instructor for that program gave a brief explanation of the curriculum, the objectives and the equipment on display. The labs had been prepared earlier so that the best possible impression would be made.
6. The Closing: The tour ended in an area where light refreshments were available. Here, the high school group was asked for comments and impressions. Their response exceeded all expectations, in that they volunteered their time and efforts to aid the Task Force in what it was trying to do. This reaction was not experienced at only one or two meetings, but from all six of the area high school groups.

An invitation was extended to the teachers in these groups to feel free to call upon the college staff to speak to their clubs, classes, or any function they may desire. They were urged to plan field trips for their classes to the campus for guided tours. They were assured that there would be guides available any time during school hours to assist them.

III. The Follow-Up

Approximately two weeks after the teachers of Occupational Education in the high schools attended the dinner, the respective two-man team representing that school paid an impromptu visit. The same procedure of seeing the principal, asking to speak to the department chairman and visiting the teachers was adhered to. In most instances the team was not able to see all of the occupational teachers but enough of them were seen to gain their assistance in obtaining a very valuable instrument for selling the occupational program. With the assistance of the supervisor of occupational education of the area public schools, the Task Force obtained from the teachers the names and home addresses of every senior student in the six senior high schools. Without the co-operative spirit that had now been obtained between the two educational groups, this could have been an impossibility. (The use of the student names and addresses will be discussed later.)

Following the first follow-up visit, the teams made visits to each school on a basis of every two to three weeks. These visits consisted of taking about two hundred copies of the college paper to be distributed to the students, with some being placed in the library. The team made available to the high school newspaper staff items of interest pertaining to graduates of that school.

IV. The Forward Approach

Let it be noted now that the other programs of selling the college had not be neglected. Rather, the departments usually associated with procurement and assignment of students became increasingly conscious of the occupational concept. (When the Registrar and the Dean of Students made their visits into the high schools, a member of the Technical and Vocational department was invited to go along. This innovation into the visitation procedure into the high schools gave fuel to the fire of endeavor that the Task Force had sought.

At the next meeting of the Task Force, two projects were approved to be carried out before the end of the public school year. They were:

1. Letters: Soon after gaining the names and home addresses of the students, one letter was prepared for the boys and one for the girls. The beginning line of the letter asked the question, "What are you going to do after high school?" The letters were printed on an "offset" press so that the same typewriter could be used to insert names giving the impression that it was a personal letter. A mail-back card was included for requesting further information or denoting interest in the programs offered by the college. Upon the receipt of the "mail-back" card, another letter, pertinent information and an invitation to visit the campus was immediately mailed to the sender of the card.
2. Art Show: Annually, the extension and fine arts departments sponsor an art show in the college library. This event occurs during the spring quarter of the college activity. Students from the elementary and junior high schools are brought in by bus to view the exhibits. Members of the Task Force recognized this as an ideal opportunity to do a selling job to prospective students of tomorrow. Plans were formulated whereby the sixth, seventh, and eighth grade and high school students could view the art show and make a tour of the Vocational laboratories within the time limit of their visit. Students in the Vocational classes volunteered to act as guides. (It is unbelievable how effective a student guide can be leading other students on a tour within

> their own domain.) Of the more than 5,000 students attending the art show in four days, the Vocational students lead over 1,700 sixth, seventh, and eighth grade and high school pupils through the Vocational shops. The outstanding comment was from the college newspaper photograher as he covered the event, "I CAN'T BELIEVE IT." This is the sentiment of the Task Force also.

Publicity of Articulation Efforts During 1970

There were numerous uses of different media to advertise the articulation efforts of 1970. The two given on the next four pages were taken from the Fall 1970 issue of The Open Door, the quarterly journal of the North Carolina Department of Community Colleges.

A Big Beginning With Much More to Come

At a summer meeting of technical institute and community college presidents in Charlotte, Dr. Edmund Gleazer, executive director of the American Association of Junior Colleges, stressed the need for more joint planning of both occupational programs and counseling in the nation's secondary and post-secondary schools.

At the same time of Dr. Gleazer's speech, North Carolina high school, technical institute and community college personnel were practicing what the educator was preaching as they began the most ambitious cooperative project they have ever undertaken. North Carolina calls this project "articulation." Some schools in the state have had joint projects before, but none of the magnitude of this one.

Joint Belief

In fact, Dr. I. E. Ready, director of the Department of Community Colleges and Dr. A. Craig Phillips, superintendent of Public Instruction, jointly remarked, "We believe that these projects hold more potential for creating better understanding and closer working relationships between community colleges, technical institutes and local high schools than almost anything that has come on the educational scene in recent years."

The overall articulation program has the backing of the State Board of Education; in fact, the State Board spearheaded the project.

Though the prime purpose of the venture was joint planning of curriculums, other goals were met, some beyond the expectations of the participants. In short, statewide, the summer project was a real "getting to know you" experience for high school, technical institute and community college personnel as well as for others in the communities who participated in some of the sessions.

A high school teacher who attended a workshop at Cape Fear Technical Institute remarked, "Until this summer, I didn't know what the technical institute was really like. Now I do, and my whole image of the school has changed."

In commenting on the workshop on his campus, a technical institute president said, "I have already seen amazing results. Misunderstanding is vanishing, not only between the two levels, but within the same level." And he added, "I found one person who didn't know what vocational programs were offered in her school."

These remarks are typical of many made lately by secondary and post-secondary personnel as they have learned more about each other's work and how in a concerted effort they can bring better occupational education to North Carolina's young people.

As was planned, one technical institute and four community colleges made in-depth studies of occupational education, including plans for smoother transition of students from one educational level to the next.

These schools are Caldwell Community College, cooperating with Caldwell County and Lenoir City administrative units; Central Piedmont Community College, cooperating with Charlotte/Mecklenburg administrative unit; Sandhills Community College, cooperating with Moore County administrative unit; Sampson Technical Institute, cooperating with Sampson County administrative unit; and Wayne Community College, cooperating with Wayne County and Goldsboro City administrative units.

With very few exceptions the remaining technical institutes and community colleges conducted workshops of shorter duration, with secondary occupational teachers, superintendents, principals and counselors as well as technical institute and community college personnel attending. Some elementary teachers also participated. As a teacher candidly remarked, "This sort of exchange of ideas should begin on the first grade level. Why wait until it is too late?"

Many institutions involved local businessmen and industrialists who explained their operations and pointed out the kinds of educational backgrounds they expect from their future employees—the young men and women who are presently students in secondary and post-secondary institutions. In turn, workshop participants visited industrial plants and business offices to get a firsthand look at what's going on in their neighborhoods.

Others Included

In order to gain a better idea of how a whole community can work together, some institutions included in their workshop sessions representatives from agencies such as Vocational Rehabilitation, the Veterans Administration and the Employment Security Commission.

Others involved in some of the workshops were staff members of the Departments of Community Colleges and Public Instruction and representatives from four-year institutions.

And what specifically did some of the schools do?

At Wayne Community College, one of the schools tapped for a summer-long project, three secondary school personnel with the assistance of a community college teacher made a comprehensive survey of occupational education needs in Wayne County.

Melvin R. Woodard, Wayne study committee chairman, who is also assistant principal of Goldsboro Middle School South, says that the study will provide the basis for developing and coordinating an interrelated vocational program beginning on the secondary level and continuing through the post-secondary level.

Mr. Woodard and his co-workers sent questionnaires to all high school seniors in the county, students who have attended Wayne Community College, occupational teachers at both levels, businessmen and industrialists. The findings were passed on to top secondary and post-secondary administrators with the idea of their putting the suggestions into action, or for further study.

As Mr Woodard explained, "Summer is a bad time to make a survey with people on vacation." To get a better response, he suggests next time making the survey some other season.

At Caldwell Community College business programs were emphasized during the summer project. Bill Armfield, Caldwell's director of occupational and transfer education, explains, "The program was a new idea in bringing high schools, the community college and local business firms into a closer partnership in designing courses and teaching methods to satisfy the needs of students and employers.

"The high schools' programs will be adjusted and the college's business courses will also be altered to eliminate duplication and to formalize standards to be achieved. In addition, business firms' specific needs and ideas will become a part of the school programs."

According to Mr. Armfield, a one-

In the top picture on the left, Charles A. Bucher, director of college transfer programs, Department of Community Colleges, addresses a group at the articulation workshop at Nash Technical Institute. In the top picture on the right, Bill Armfield (left), director of occupational and transfer education at Caldwell Community College, outlines objectives of the school's articulation program. Those in session, in addition to Mr. Armfield are (left to right) C. H. Lathan, Hudson High; Kenneth Roberts, Hibriten High; Bill Metcalf, Granite Falls High; and Ted Watson, Gamewell-Collettsville High. Seated (left to right) are Mrs. Lorraine Minton, Caldwell Community College; Mrs. Martha Martin, Granite Falls High; Mrs. Kathy Hiatt, Lenoir High; and Mrs. Martha Walsh, Hibriten High. In the bottom picture on the left, Gilmer Dodson, head of the Department of Data Processing at the Technical Institute of Alamance, gives Herman Davis of the Williams High School faculty pointers in interaction with a computer. Looking on are other public school teachers and guidance counselors who attended an articulation workshop this past summer. In the photo (left to right) are Mr. Dodson, Geralene Champion, Eastern High; Nancy Williams, Southern High; and Nancy Bell, Mr. Davis and Beulah Evans, Williams High. In the bottom picture on the right, Bob Jordan (right foreground) conducts a tour of Jordan Lumber Company at Mt. Gilead in connection with the articulation conference held at Montgomery Technical Institute. (The photo taken at the Technical Institute of Alamance is courtesy of The Burlington Times-News.)

year general clerical program was developed by the group. This program was scheduled to begin in September.

Montgomery Technical Institute's 10-day workshop was kicked off with a speech by Wade Mobley, superintendent of Montgomery County Schools, in which he made this challenge, "All of us must work together for the youth and adults of our county if we are to keep our faith with the taxpayers." And the workshop was concluded with a talk by Technical Institute President David Bland who paraphrased Mr. Mobley's words this way, "We must hold ourselves accountable for the expenditure of public funds to the very people we are serving with those funds."

Rupert H. Marsh, Montgomery Tech director of continuing education, explains that the workshop was intended to seek ways for public-supported education to keep the young people in Montgomery County and to seek ways for this education to serve those young people and adults who remain in the county in a better way.

The workshop program was designed by a committee with representatives from industry, the Montgomery County Board of Education and Montgomery Tech.

After an introduction to the county's industries by means of tours, the workshop stressed the importance of each teacher's being a vocational information center.

Meeting at Richmond Technical Institute for a five-day conference were 24 teachers and counselors from Richmond and Scotland County schools. Joseph H. Nanney, Richmond Tech president, in a welcoming address, put it this way, "We hope that this conference will help us to work together more efficiently through a thorough understanding of the problems and opportunities which confront the technical institute and the public schools. This can best be brought about by a give and take dialogue on the issues that concern us."

Much ground was covered at these workshops and conferences and in the five in-depth studies, but the questions are: What will be the results? What steps will be taken in the future to nourish past achievements?

A few of the specific recommendations resulting from the workshops are these:

An advisory council composed of public school teachers and technical institute instructors should be formed to determine what is being taught, techniques used and expected outcomes.

Vocational programs should be introduced at the grammar school level with studies made to determine the children's special needs.

A guidance counselor in the area of occupations should be employed to assist the classroom teacher with counseling. This person would be in addition to the counselor for academic studies.

Technical institute and community college representatives should be on hand to meet parents at PTA meetings.

Workshops should be held for the purpose of identifying the potential school dropout. Curriculums should then be developed to meet the individual needs of these students.

Secondary and post-secondary teachers should be exchanged in the classrooms and at faculty meetings.

Of all the comments made following the planned articulation programs this past summer, the one heard most frequently was: "We must continue what we have begun." As a high school principal remarked, "If we stop now, we have defeated our purpose. Think of the people in our schools we haven't reached." And he added, "Yes, the spark is there, but the flame is yet to come."

Already secondary and post- secondary school personnel are meeting together informally in an effort to "keep in touch." And many have expressed the desire to attend planned workshops again next summer, and the summers following.

The Conversion of an Asheville Teacher

By Ted Carter

Teacher, Asheville High School

We found a little note in our mail box one day suggesting that if we so desired we could receive a "stipend" of $20 for attending an "Articulation Seminar" at Asheville-Buncombe Technical Institute.

Calculating on our computer (fingers), we figured that sum meant roughly $4 an hour. We could listen to anything for that much money, with no blood, sweat or tears involved, so we sent in the little certificate. Besides, we were curious. Just what did those folks over at A-B Tech have to offer that was worth paying folks to listen? It's the first time we've ever been paid to get educated.

Thomas Simpson, A-B Tech president, met with a group of nearly 50 teachers from high schools around Asheville, made them welcome, then turned them over to his chief assistant, Jack Davis, for guided tours of the campus, followed up by group discussions in each of the five areas of school instruction — engineering technology, business education, health occupations education, hotel-motel and culinary technology and vocational education.

At 4 p.m., after five hours, we were still asking questions. Previously, we had thought of Tech as a place where boys and girls who weren't very good students could go and get working educations.

We were dead wrong about that.

Imagine a poor student signing up for chemical engineering to study organic chemistry, physics, qualitative analysis, hydraulics and pneumatics and applied psychology. Civil engineering requires math, surveying, physics, drafting, data processing and engineering technology.

Electronics requires physics, math, psychology, Boolean algebra, electronics, circuit design and microelectronics.

Drop over to the fine hotel-motel and food education school and see top students operating the exclusive Mountain Tech Lodge under the supervision of jovial innkeeper Rick Johnnson, a real pro in the arts of entertaining the weary wanderer. Just to the rear of the entrance is the spic and span banquet hall-cafeteria and to the rear of that is the model stainless steel kitchen where masterchef Robert Werth of Bordeaux, France, teaches the "classic system" of food preparation. On the wall of his office, over his desk a certificate of fellowship in "Le Grand Counseil L" Academic Du Vin De Bourdeau." He also has an honorary brewmeister certificate from Budweiser and a letter of commendation from former Gov. Dan Moore. He has worked with the Hilton Hotels and previously at the Waldorf Astoria. Working with him is Ann Maxwell Cooley of Goucher College and the Ecole du Cordon Bleu in Paris. She, too, teaches the "classic system." The food they prepare is served in the cafeteria.

Latest Model Computer

N. Eugene Goode, member of the North Carolina Bar and graduate of the University of North Carolina, presides at the big electronics data processing machines in the business school just down the hall. The latest model computer is tied in with the "big boy" down in the Research Triangle near Durham. They've had computers since 1963, but not like this one.

A new department is just being opened up—allied health education. A new building for the department is now under construction and will be finished next year.

A new office building just across Victoria Road will lend dignity to the growing institution, which has seen amazing growth in its nine years of existence. It now has over 700 students for its concentrated, basically junior college courses. Its teachers have been carefully chosen by Mr. Simpson for their achievements in industry as well as academic degrees. Bill Dickinson, mechanical engineering; Stevens Creasman, electronics; Robert Morrell, chemical engineering; Albert Awald, tool and die making; to mention only a few.

They are all men who have "been there" not only in theory but actually in their work. They're "master teachers."

The students they graduate can expect to fill positions in industry with immediate pay from $5,000 to $9,000 annually. That isn't bad for two-year study. Students may go to school here part time and hold down jobs in industry. They also may go to school at night.

Tech had something to sell to us as teachers and advisers to students in high school. They were smart enough to know that had they invited us over to an "open house" we probably wouldn't have attended, so they paid us to come. We went and now we, too, are excited about our hometown institute of technology. They made a believer out of us.

They also gave us another idea. If such a soft sell would work for Tech, then why not us? So we cashed the check they gave us and took our own boss out to dinner.

Impress our boss? Not him. He's a tough cookie. On the way home he bummed us for a pack of cigarettes and to top that off, he's now assigned us the toughest class in school this summer.

Epilogue—Moral of this tale is, if you're going to entice the customers to your establishment, you better have some bargains to offer. A-B Tech did!

The article by Mr. Carter originally appeared in The Asheville Times.

PART III

EVALUATION OF THE ARTICULATION EFFORTS DURING 1970

After studying the articulation efforts during 1970 as given in PART II of this report--especially the representative remarks of both the elementary and secondary school participants and some administrators of the technical institutes and community colleges--it would be folly, in the opinion of this writer, to conclude anything other than these efforts were, relatively, extraordinarily beneficial to both educational systems and the people who actively participated.

Looking more closely at the programs in terms of the stated objectives developed at the State level, however, prompts additional remarks.

The Plan I programs, for example, reflect varying degrees of attention to such objectives as (1) developing model administrative arrangements, (2) providing opportunity for articulation of subject matter, (3) promoting innovation and coordination, and (4) providing a better total program of occupational education. On the other hand, however, the procedural aspects of these programs as stated at the State level are questioned with such expectations during a six-week to three-month period of the following: (1) to make detailed studies of the needs of the business, industrial, and agricultural communities; (2) to study the need for occupational education for students at both levels; (3) to develop a master plan for occupational education; (4) to develop proposed curricula for high schools, technical institutes, and community colleges; and (5) to see to it that articulation took place. Additionally, it is the opinion of the writer that certain statements concerning the Plan I programs allowed for too much interpretation on the parts of the participants.

The Plan II program guidelines, in the opinion of the writer, allowed for much creativity and innovation on the parts of the technical institutes and community colleges. The primary, possible detriment to such an effort, however, was, in this writer's opinion, that the program was accorded secondary importance in that it could be conducted only if "left-over funds" were available. (The later provision of up to $2,000 outright grants helped alleviate this situation, in the writer's opinion; however, it was unclear as to the level of knowledge of these additional, available funds on the parts of the technical institutes and community colleges. A written notice of this provision was included on page 10 of the "SBE Highlights" attachment to the May 1970 issue of "Community Colleges Bulletin" which was mailed to each technical institute and community college.)

Relative to all types of articulation programs conducted, it appears to the writer that rather similar types of programs were conducted with local, state, and/or federal funds which ranged in approximate costs of $350 (local funds) to $25,000 (federal funds). In the opinion of the writer, this was quite a wide range of funds expended per institution to accomplish relatively similar objectives. The length, depth, and number of participants of each program mainly accounted for this wide range, however.

As gathered from the visits made to leaders of 15 articulation programs, there appeared to be little evidence that the Boards of Trustees of technical institutes and community colleges and the Boards of Education of school administrative units (the policy makers) were particularly aware of the 1970 programs--much less the possible, far-reaching implications of such activities.

In the final analysis, however, the writer would encourage the reader to re-study the first paragraph of this part. It is this overall impression, reaction, or evaluation which this writer wishes to make.

PART IV

SUGGESTIONS FOR CONTINUING ARTICULATION EFFORTS

The suggestions contained in this part are based upon the writer's own rather extensive understanding of the articulation efforts during and prior to 1970; his personal experiences as an educator in the elementary and secondary system for six years, the community college system for four years, and in both systems during the past year; and his interpretation of the suggestions relating to articulation of numerous educators in both educational systems during the past four months.

Suggestion 1. The State Board of Education and the State Advisory Council on Vocational Education should adopt statements strongly encouraging the elementary and secondary system and the community college system (specifically mentioning the State Department of Public Instruction and the State Department of Community Colleges) to accord formal and informal articulation efforts on a continuing basis a matter and activity of primary importance.

Suggestion 2. The State Board of Education and/or the heads of the State Department of Public Instruction and the State Department of Community Colleges should appoint a State Education Articulation Committee that would be composed of an equal number of representatives from the two education systems (including persons from both the schools and the institutions and the two State-level education departments). The same group should appoint a Chairman and/or an Executive Director of this committee who is considered "an equal employee" of both systems--such as a person from the State Advisory Council on Vocational Education or the Occupational Research Unit. Such a committee--and especially the Chairman and/or the Executive Director--should have the necessary power, leadership, time, and funds to provide leadership and produce evidence that improved articulation is being accomplished between the two educational systems under the State Board of Education in North Carolina. ("Everybody's job is nobody's job.")

Suggestion 3. The State Education Articulation Committee should assist in coordinating all formal efforts of articulation between the two educational systems. In efforts of effecting joint curriculum development between the two systems, the committee should study the four following public school laws of North Carolina:

(1) Chapter 115. (Elementary and Secondary Education.), Subchapter X. (Instruction.), Article 24. (Courses of Study.), Paragraph 115-198. (Standard course of study for each grade.)

"Upon the recommendation of the State Superintendent, the State Board of Education shall adopt a standard course of study for each grade in the elementary school and in the high school. In the course of study adopted by the State Board, the Board may establish a program of continuous learning based upon the individual child's need, interest, and stages of development, so that the program has a nongraded structure of organization. These courses of study shall set forth what subjects shall be taught in each grade, and outline the basal and supplementary books on each subject to be used in each grade.

The State Superintendent shall prepare a course of study for each grade of the school system which shall be taught in each grade, and outline the basal and supplementary books on each subject to be taught together with directions as to the best methods of teaching them as guidance for the teachers."....

(2) Chapter 115. (Elementary and Secondary Education.), Subchapter X. (Instruction.), Article 24. (Courses of Study.), Paragraph 115-199. (Adult education.)
"When in the judgment of the State Board of Education a program of adult education should be established as a part of the public school system and when appropriations have been made therefor, there shall be organized and administered under the general supervision of the State Superintendent of Public Instruction, courses in adult education: Provided, that county and city boards of education, in their discretion, may institute and support such programs from local funds upon the approval of the State Board of Education."

(3) Chapter 115A. (Community Colleges, Technical Institutes, and Industrial Education Centers.), Article 1. (General Provisions for State Administration.), Paragraph 115A-1. (Statement of purpose.)
"The purposes of this chapter are to provide for the establishment, organization, and administration of a system of educational institutions throughout the State offering courses of instruction in one or more of the general areas of two-year college parallel, technical, vocational, and adult education programs, to serve as a legislative charter for such institutions, and to authorize the levying of local taxes and issuing of local bonds for the support thereof. The major purpose of each and every institution operating under the provisions of this chapter, shall be and shall continue to be the offering of vocational and technical education and training, and of basic, high school level, academic education needed in order to profit from vocational and technical education, for students who are high school graduates or who are beyond the compulsory age limit of the public school system and who have left the public schools."

(4) Chapter 115A. (Community Colleges, Technical Institutes, and Industrial Education Centers.), Article 1. (General Provisions for State Administration.), Paragraph 115A-5. (Administration of institutions by State Board of Education;....)

> "The State Board of Education may adopt and execute such policies, regulations and standards concerning the establishment and operation of institutions as the Board may deem necessary to insure the quality of educational programs, to promote the systematic meeting of educational needs of the State, and to provide for the equitable distribution of State and federal funds to the several institutions....
>
> The Board shall have authority with respect to individual institutions:...to establish and administer standards for professional personnel, curricula, admissions, and graduation; to regulate the awarding of degrees, diplomas, and certificates;"....

In addition to these laws, the committee should study any policies relative to curricula found in the Minutes of the State Board of Education.

Suggestion 4. In providing leadership for the assistance in coordination of all formal efforts of articulation between the two educational systems under the State Board of Education, the Committee should consider the following suggestions:

(A.) Study this report in detail and others that are identified along with those which might have been omitted or are now becoming available.
(B.) All community colleges, technical institutes, and local administrative units should have equitable and uniform opportunities and resources to engage in formal articulation efforts.
(C.) No guidelines should be developed which might stifle initiative and innovation at the local level.
(D.) Funds for articulation activities should be included in the regular budgets of all technical institutes and community colleges--beginning with the year 1971-72. (If notice of such were given early enough during 1971, then formal articulation activities could commence as early as July 1, 1971, and continue through June 30, 1972.)
(E.) Administrative leadership for initiating, planning, conducting, and evaluating articulation activities should rest with the technical institutes and community colleges.
(F.) The Committee might consider a conference or workshop during April, May, or June of 1971 for representatives of 1970 articulation committees.
(G.) The Committee might consider the implementation of the proposal described in the Appendix beginning on page B-12 (Item 11).

APPENDICES

APPENDIX A

DETAILED BACKGROUND OF PLANNING, IMPLEMENTING AND REPORTING OF ARTICULATION EFFORTS DURING 1970

1. On February 27, 1970, Dr. A. Craig Phillips, State Superintendent of Public Instruction, sent a letter to all local unit school superintendents in which he indicated that the State Board of Education was pursuing a policy of attempting to build articulation procedures between secondary and post-secondary institutions. He indicated support of this policy and encouraged initiative relative to such opportunities.

2. On March 2, 1970, Dr. I. E. Ready, Director of the State Department of Community Colleges, sent a letter to the presidents of all technical institutes and community colleges (along with a copy of Dr. Phillips' February 27, 1970, letter to local unit school superintendents) in which he discussed the identical topic. Additionally, he indicated the institutions' perogative to request budget transfers to financially support such efforts.

3. On March 5, 1970, the State Board of Education approved "a proposed summer experience involving personnel for the secondary school system and the Community College System".

   The proposal was as follows:

   "A Summer Experience Involving Personnel for the Secondary School System and the Community College System

   It is proposed that a model educational administrative arrangement be developed in five administrative units in which a community college or technical institute lies. The purpose of this program would be as follows:

   (1) To provide an opportunity for articulation of subject matter between secondary and post-secondary institutions.

   (2) To promote innovation and coordination in both secondary and post-secondary institutions in the unit.

   (3) To provide a better program of occupational education for all students at either level.

   Procedures for this program would be as follows:

   (1) Five administrative units would be selected, based upon an application which indicates that both the superintendent of the administrative unit and the president of the post-secondary institution are vitally concerned with this problem.

   (2) These institutions would be provided with additional

funds for both fiscal years 1969-70 and 1970-71 to employ a team of individuals from the administrative unit. This team would be comprised, in most instances, of a principal, guidance counselor, and an occupational teacher, all from one school.

(3) These individuals would be placed on salary, to be paid by the community college or technical institute, based upon their certificats under which they are employed during the regular school year.

(4) These individuals would be responsible, during a period of from six weeks to three months, for developing a master plan for occupational education for the programs which fall within that county (including both city and county units).

(5) These individuals would make detail studies of needs of the business, industrial, and agricultural communities. They would study the need for occupational education for students at both levels. They would be supervised jointly by the superintendent and the president of the institution. They would develop proposed curricula for both institutions, seeing to it that articulation takes place.

Funds would be provided for this project from unexpended funds at the post-secondary institution for the remainder of fiscal year 1969-70, and additional funds would be made available by the State Board of Education for July and August of fiscal year 1970-71. There would be an approximate cost of $4,500 per program, for a total of approximately $22,500."

4. Shortly after March 5, 1970, a State-level Articulation Committee was formed to give leadership toward implementation of the proposal approved by the State Board of Education plus any other matters relating to articulation programs during the summer of 1970. The members of this committee were:

(1) Mr. John H. Blackmon (Chairman)
Administrative Assistant to the Director
State Department of Community Colleges

(2) Dr. Charles J. Law, Jr.
Director of the Division of Occupational Education
State Department of Public Instruction

(3) Mr. Anthony J. Bevacqua
Director of the Division of Occupational Education
State Department of Community Colleges

(4) Mrs. Thelma C. Lennon
Director of the Division of Pupil Personnel Services
State Department of Public Instruction

(5) Mr. Raymond L. Jefferies, Jr.
Coordinator of Student Personnel Services
State Department of Community Colleges

5. On March 20, 1970, Dr. Ready wrote the presidents of all technical institutes and community colleges informing them of the March 5, 1970, action of the State Board of Education. He called this action "Plan I" and indicated that any institution interested in pursuing Plan I would have to complete a program proposal signed by the president and the local superintendent(s) involved no later than April 10, 1970. (A suggested outline of a project proposal was included.)

In the same correspondence, Dr. Ready informed the presidents of a "Plan II" This was as follows:

> "Plan II
>
> It is proposed that any institution, upon request, be authorized to make budget transfers for the purpose of conducting a workshop to include occupational teachers, principals, counselors and others. These programs must be conducted within budgeted funds allocated to your institution. Guidelines for conducting this type program are as follows:
>
> (1) The overall objective must be that of providing better articulation between the institutions and the high schools in the institutions' service area.
>
> (2) The program must be approved by and coordinated with local public school officials.
>
> (3) All programs funded by 1969-70 budget transfers must be conducted prior to July 1, 1970. Programs conducted after July 1, 1970 will have to be funded by budget transfers in your 1970-71 budget.
>
> (4) Funding will be by budget transfers within the institution's budget. Requests for budget transfers will be sent to the Associate Director, Department of Community Colleges for review and approval. For the purpose of conducting this program, funds may be transferred out of any line item with an anticipated surplus. Transfers should be made into line items: 241, 242, 244, and 245. In the event an institution has returned surplus funds or budget savings to the State level or has waived an allotment to supplement extension funds, it may request a reallocation if insufficient funds are available. While reallocations may be limited by smallness of the amount in reserve, an effort will be made to meet needs as nearly as possible for such an institution.

(5) Stipends not to exceed $30.00 per day may be paid to public school personnel, providing they are not at that time on the public school payroll. Participants may be paid mileage at the rate of 9¢ per mile.

(6) In certain cases, certificate credit may be earned if satisfactory arrangements can be made with the local superintendent(s)."

A copy of this correspondence was sent to Dr. Phillips.

6. Beginning on April 17, 1970, and on dates afterward, Dr. Ready wrote to appropriate presidents of technical institutes and community colleges the following letter concerning their indicated participation in "Plan II" articulation programs:

"Subject to approval by our business office of any required transfer of funds, your institution is approved to participate in Plan II of the Articulation Program as specified in my memorandum to you dated March 20, 1970. For funding purposes, you should follow the procedures as indicated in the above memorandum, Plan II, (4). This paragraph reads as follows:

> Funding will be by budget transfers within the institution's budget. Request for budget transfers will be sent to the Associate Director, Department of Community Colleges for review and approval. For the purpose of conducting this program, funds may be transferred out of any line item with an anticipated surplus. Transfers should be made into line items: 241, 242, 244, and 245. In the event an institution has returned surplus funds or budget savings to the State level or has waived an allotment to supplement extension funds, it may request a reallocation if insufficient funds are available. While reallocations may be limited by smallness of the amount in reserve, an effort will be made to meet needs as nearly as possible for such an institution.

Requests for transfers of funds which were included with your proposal have been forwarded to our business office.

Let us know if you need someone from our staff to assist in planning your program.

cc: Dr. Charles Law
Mrs. Thelma Lennon
Mr. Charles Holloman
Mr. Tony Bevacqua
Mr. Ray Jefferies"

7. On April 24, 1970, Dr. Phillips and Dr. Ready sent a joint letter to all local units school superintendents and presidents of technical institutes and community colleges as follows:

"TO: Presidents and Superintendents

FROM: Craig Phillips and Epps Ready

The response to the State Board of Education's encouragement of specific plans to promote articulation between secondary and post-secondary occupational education programs has been most gratifying. Those proposals which were identified as requiring a local budget transfer within the community college or technical institute budget have already been given permission to proceed. The president of the community college or technical institute will make the appropriate contacts with local secondary school administrators and will also develop the fiscal arrangements necessary to implement the project.

There were several proposals written which contemplated a much more comprehensive and concerted effort on the part of local administrative units and community colleges or technical institutes. Fiscal difficulties prohibit us from funding more than five, though many indicated good ideas and new approaches. For each of these five, appropriations of approximately $4,500 will be made from the Department of Community Colleges. The five projects are as follows:

Caldwell Technical Institute, Hudson, North Carolina, cooperating with Caldwell County and Lenoir City administrative units

Central Piedmont Community College, Charlotte, North Carolina, cooperating with Charlotte/Mecklenburg administrative unit

Sandhills Community College, Southern Pines, North Carolina, cooperating with Moore County administrative unit

Sampson Technical Institute, Clinton, North Carolina, cooperating with Sampson County administrative unit

Wayne Community College, Goldsboro, North Carolina, cooperating with Wayne County and Goldsboro City administrative units.

We believe that these articulation projects hold more potential for creating better understanding between community colleges, technical institutes, and local administrative units than almost anything that has come on the educational scene in recent years.

We thank you for your cooperation and pledge to you our continued support."

8. Also on April 24, 1970, Dr. Ready wrote the presidents of the five technical institutes and community colleges which were selected to participate in "Plan I" programs as follows:

"As indicated in a recent memorandum sent to you by Craig Phillips and me, your institution was one of five institutions chosen to participate in Plan I of the Articulation Program. Plan I is as follows:

Develop a model educational administrative arrangement with the public school administrative unit in which your institution is located. The purpose of this program is as follows:

(1) To provide an opportunity for articulation of subject matter between secondary and post-secondary institutions.

(2) To promote innovation and coordination in both secondary and post-secondary institutions in the unit.

(3) To provide a better program of occupational education for all students at either level.

Procedures:

(1) Both the superintendent of the administrative unit and the president of the post-secondary institution must be vitally concerned with this problem.

(2) The institution will be provided with additional funds for both fiscal years 1969-70 and 1970-71 to employ a team of individuals from the public school administrative unit. This team should be comprised, in most instances, of a principal, a guidance counselor, and an occupational teacher, chosen on the basis of knowledge of programs and ability to work as team members. The total additional funds provided for both years will not exceed $4,500.

(3) These individuals may be placed on salary, to be paid by the community college or technical institute, based upon their certificates under which they are employed during the regular school year (if not at that time on the public school payroll). Funds also may be used for other expenses related to the studies, including travel, and supplies and materials.

(4) A task force made up of this team, plus selected institution staff members, will be responsible, during a period of from six weeks to three months, for developing a master plan for occupational education for the programs which fall within that administrative unit (can include both city and county units).

(5) This task force will make detailed studies of needs of the business, industrial, and agricultural communities. It will study the need for occupational education for students at both levels. It will be supervised jointly by the superintendent and the president of the institution. It will develop proposed curricula for both institutions, seeing to it that articulation is provided for.

Each institution will conduct the study as outlined in Plan I and upon conclusion will provide a copy of the study report to Dr. Charles Law, Director of the Division of Occupational Education, Department of

Public Instruction, and a copy to this office.

If you have notalready done so, you should make a request to the Associate Director, Department of Community Colleges, for a special allotment of funds to conduct this program not to exceed $4,500.

If you need assistance from our staff, please let me know. We are anxious to assist in any way possible to promote improved articulation between your institution and the high schools in your area.

CC: Dr. Charles Law
Mrs. Thelma Lennon
Mr. Charles Holloman
Mr. Tony Bevacqua
Mr. Ray Jefferies"

9. On April 29, 1970, Dr. Ready wrote to all presidents of technical institutes and community colleges the following letter:

"We are planning to make a report to the State Board of Education concerning the status of articulation programs between our institutions and the secondary schools.

In order that we may know what you are planning to do this summer, please check the enclosed card and return it as soon as possible.

cc: Dr. Charles Law
Mrs. Thelma Lennon
Mr. Charles Holloman
Mr. Tony Bevacqua
Mr. Ray Jefferies

______________________________ ________________
Institution Date

1. _____An articulation program with the secondary schools is being planned and a program proposal has been or will be submitted to the state office.

2. _____An articulation program is planned but a specific program proposal will not be necessary.

3. _____No articulation program is planned for this summer.

________________________________"
Signed

10. On May 7, 1970, the State Board of Education received as information the following "Report on Articulation Programs":

"Report on Articulation Programs
Between Secondary and Post Secondary
Institutions (Community Colleges and Technical Institutes)

Plan I - Develop model educational administrative arrangement resulting in a master plan for occupational education for the programs which fall within that administrative unit.

Caldwell Technical Institute, Hudson, North Carolina, cooperating with Caldwell County and Lenoir City administrative units

Central Piedmont Community College, Charlotte, North Carolina, cooperating with Charlotte/Mecklenburg administrative unit

Sandhills Community College, Southern Pines, North Carolina, cooperating with Moore County administrative unit

Sampson Technical Institute, Clinton, North Carolina, cooperating with Sampson County administrative unit

Wayne Community College, Goldsboro, North Carolina, cooperating with Wayne County and Goldsboro City administrative units.

Plan II - Conduct workshop to provide better articulation between the institution and the high schools in the institutions' service area.

Anson T. I.
Asheville-Buncombe T. I.
Beaufort County T. I.
Bladen T. I.
Caldwell T. I.
Cape Fear T. I.
Carteret T. I.
Catawba Valley T. I.
Central Carolina T. I.
Central Piedmont C. C.
Cleveland County T. I.
College of Albermarle
Craven T. I.
Davidson County C. C.
Durham T. I.
Edgecombe County T. I.
Fayetteville T. I.
Gaston College
Halifax County T. I.
Haywood T. I.
Isothermal C. C.
James Sprunt Institute
Johnston County T. I.
Lenoir C. C.
Martin T. I.
McDowell T. I.
Montgomery T. I.
Nash T. I.
Onslow T. I.
Pamlico T. I.
Pitt T. I.
Richmond T. I.
Rowan T. I.
Sampson T. I.
Sandhills C. C.
Southwestern T. I.
Surry C. C.
T. I. of Alamance
Tri-County T. I.
Vance County T. I.
W. W. Holding T. I.
Wayne C. C.
Western Piedmont C. C.
Wilkes C. C.
Wilson County T. I.

Not yet reported: Forsyth T. I., Guilford T. I., Henderson County T. I., Randolph T. I., Roanoke-Chowan T. I., Robeson T. I., Rockingham C. C., Southeastern C. C., Person County T. I.

Institutions That Made Proposals for Plan I of the Articulation Program

Guilford Technical Institute
Sampson Technical Institute
Caldwell Technical Institute
Halifax Technical Institute
Bladen Technical Institute
Richmond Technical Institute
Montgomery Technical Institute
Forsyth Technical Institute
Central Piedmont Community College
Sandhills Community College
Wayne Community College

Criteria Used in Selection

1. Need - Programs and services offered at secondary and post secondary level.

2. Scope of articulation effort - Number of people, programs, and services which will be affected - total involvement.

3. Reasonable geographic distribution.

4. Type of institution - Both community colleges and technical institutes should be included.

5. Approval and support of Board of Trustees.

6. Approval and support of public school officials.

7. Plans for evaluation and distribution of study to:
   a. Our institutions
   b. Public schools"

11. Additionally on May 7, 1970, the State Board of Education approved the following:

> "Authorized the Director or Associate Director (of the State Department of Community Colleges) to allot a maximum of $2,000 to institutions wishing to participate in the articulation program but which have no funds in their current operation budget to use for this purpose."

12. On May 20, 1970, Dr. Ready wrote to all presidents of technical institutes and community colleges the following letter concerning "Plan II" articulation programs:

> "It appears now that almost all institutions will conduct some kind of articulation program with the secondary schools this summer.

In order that we may share our experiences in this articulation effort, we are asking that each institution conducting such a program, prepare and forward to our office a brief description and evaluation of the program, to include recommendations for future years.

You should use the following outline in preparing your report:

1. Name of institution
2. Purpose of the program
3. Procedures
4. Evaluation
5. Recommendations

The report should be brief and should be made at the conclusion of your articulation program, but not later than September 1, 1970.

IER:hd"

13. On June 9, 1970, Dr. Ready wrote to all presidents of technical institutes and community colleges the following letter:

"It has come to our attention that some presidents of institutions with Plan II articulation programs extending beyond July 1, 1970, are under the impression that these programs may be funded by 1969-70 budget transfers. This is not permissible.

As indicated in my memorandum dated March 20, 1970, all programs funded by 1969-70 budget transfers must be conducted prior to July 1, 1970. Programs conducted after July 1, 1970, will have to be funded by budget transfers in your 1970-71 budget.

IER:hd"

.4. On June 16, 1970, Dr. Dan W. Moore and Mr. Fred W. Manley, Director and Assistant Director of the Occupational Research Unit, respectively, met with Mr. John H. Blackmon, Administrative Assistant to the Director of the State Department of Community Colleges and Chairman of the State-level Articulation Committee, to discuss the articulation projects. Dr. Moore and Mr. Manley indicated to Mr. Blackmon the partial role of the Occupational Research Unit (ORU) of the Division of Research of the State Department of Public Instruction as that of providing services to the State Department of Community Colleges and the technical institute-community college system and offered to assist in the articulation program.

15. Mr. Blackmon was most receptive to the offer of assistance, and this offer was formalized to Mr. Blackmon from Dr. Moore in a letter dated June 17, 1970, as follows:

"Thank you for the opportunity for Fred Manley and me to meet with you on Tuesday. We appreciate your sharing information concerning current activities designed to improve articulation among high schools, community colleges, and technical institutes.

As we mentioned in our meeting, two research priorities identified by the ORU relate directly to these articulation projects. One stated priority is the examination of the articulation process, and another is the evaluation of experimental, developmental, and exemplary projects. Studies of the articulation process could be conducted within the context of either of these priorities. In fact, ORU staff members have met with representatives of agencies operating under both Plans I and II in order to provide assistance in research design and methods. We plan to continue to respond to similar requests from educational agencies.

Based upon our meeting with you, Fred and I believe that a study of the current status of articulation would be appropriate. With encouragement from you and others concerned with this process, the ORU would like to initiate such a project. We can provide a proposal as to how this might be accomplished if your committee agrees that such a study is needed and if committee members will encourage participation by state and local personnel who could offer assistance.

A second major topical area within which the ORU could make a contribution is in evaluating the effectiveness of specific projects designed to improve articulation. Obviously, this cannot be done for many of the workshops already completed, but the ORU would be receptive to invitations to assist in designing evaluative systems as projects are developed and implemented in the future.

We look forward to a response from you concerning the above comments. We would especially appreciate additional suggestions concerning the role and functions of the ORU in stimulating and facilitating articulation among middle schools, high schools, community colleges, and technical institutes.

CC: Mr. Fred Manley"

16. After receiving the formal offer of assistance from Dr. Moore, Mr. Blackmon shared this with Dr. I. E. Ready, Director of the State Department of Community Colleges, and the State-level Articulation Committee. Both Dr. Ready and the Committee agreed to obtain assistance from the ORU, and Mr. Blackmon requested Dr. Moore and Mr. Manley to proceed with a formal proposal which was offered in the June 17 correspondence.

17. The proposal, authored by Dr. Moore and Mr. Manley, was as follows:

"Current Status of Articulation
Among North Carolina's Secondary Schools
Technical Institutes, and Community Colleges

In determining the directions for additional projects designed to facilitate articulation among secondary schools, technical institutes, and community colleges, it is appropriate to examine previous activities in this area. Such an examination can be conducted in two phases. First, one should look at position papers, research reports, and guides which have been published by individuals involved in diverse articulation projects throughout the United States. These publications may describe projects unlike those conducted in North Carolina and/or indicate criteria to be used in evaluating the effectiveness of articulation. *The ORU proposes to prepare a synthesis paper from these documents which focuses on the value of others' experiences in articulation for North Carolina. This paper should serve as a succinct statement of research on articulation for use by individuals desiring background data before designing additional projects.*

A second phase in determining the current status of articulation, especially with respect to North Carolina, is to conduct an ex post facto examination of the evaluation reports submitted by institutions sponsoring articulation projects under Plans I and II. It should be possible to delineate common elements among these reports, both with respect to type of program and evaluative criteria. One would expect, for example, that most evaluation reports will include comments which relate to topics such as receptivity of participants to information presented, familiarity of secondary and post-secondary personnel with each other's programs, and plans to continue relationships between secondary and post-secondary institutions through activities such as joint curriculum committees. *The ORU proposes to examine available evaluation reports in order to determine common elements and to prepare a summary statement which would be representative of articulation projects conducted during the summer of 1970.*

Although the possibilities of over-generalizing from available data and some loss of project individuality exist, an examination of evaluation reports should indicate trends within the articulation movement. *The trends identified should suggest gaps which might be filled through additional projects as well as identify aspects of the articulation process which should be examined more closely.*

Although these approaches will provide valuable data for individuals interested in articulation among secondary and post-secondary institutions, ORU personnel, in anticipation of an increase in the number and scope of articulation projects, feel a *need for objective criteria by which one can measure the effectiveness of these projects.* Criteria as used here may refer to answers to questions such as following: What are the essential components of the articulation process, or what activities indicate that articulation between schools has occurred? The determination of an acceptable list of components or activities would allow one to ask to what extent does the articulation process initiated by X High School and Y Technical Institute reflect these criteria.

In order to establish an acceptable list of essential components of the articulation process, the first two phases discussed above should be employed. In addition to the review of literature and the examination of evaluation reports, it is likely that further study would be necessary. In the event that this is true, it might be appropriate to survey personnel in secondary and post-secondary institutions in delineating and refining acceptable criteria against which to measure the effectiveness of articulation projects. As a third activity (6-8 months), *the ORU proposes to identify the essential components of the articulation process and to incorporate these components into a rating scale (or other appropriate instrument) which could be used in evaluating articulation projects.*

In summary, this statement briefly presents a three-phase proposal:

1) a synthesis of research on articulation;

2) a composite, ex post facto evaluation of summer 1970 articulation projects in North Carolina; and

3) the development of an instrument to measure the effectiveness of articulation.

The results of these efforts should provide context for decisions related to the development of additional articulation projects."

18. On July 9, 1970, Dr. Moore received from Mr. Blackmon the reaction of the State-level Articulation Committee regarding the proposal. It was as follows:

> "The Articulation Committee wishes to commend you for the fine proposal which you submitted.
>
> The Committee feels that all sections of the proposal are important but that the greatest contribution can be made by placing emphasis on the examination of available reports, the number two item in the three phase proposal.
>
> I shall be glad to make available to you institutional reports which are sent to this office.
>
> cc: Mr. Tony Bevacqua
> Dr. Charles Law
> Mrs. Thelma Lennon
> Mr. Ray Jefferies"

19. On August 17, 1970, ORU Assistant Director Fred W. Manley agreed to assume leadership and responsibility for conducting a study of the current status of articulation between the State's public system of elementary and secondary schools and public system of technical institutes and community colleges and present a report to the State-level Articulation Committee. He was to work very closely with the Chairman of the Committee, Mr. John H. Blackmon of the State Department of Community Colleges.

20. Upon conferring with Mr. Blackmon on August 17, Mr. Manley concurred with Mr. Blackmon's plan to visit the leaders of the Plan I Articulation Programs conducted under the auspices of the five selected technical institutes

and community colleges. The dates and locations of these visits were as follows:

1. August 18, 1970 - Wayne Community College
2. August 20, 1970 - Sandhills Community College
3. August 24, 1970 - Sampson Technical Institute
4. August 26, 1970 - Central Piedmont Community College
5. August 27, 1970 - Caldwell Community College

21. In a conference with Mr. Blackmon on October 6, 1970, Mr. Manley proposed that the pair visit the leaders of eight Plan II Articulation Programs and two Disadvantaged and Handicapped Articulation Programs conducted under the auspices of ten selected technical institutes and community colleges. The ten institutions to visit were selected by Mr. Manley based upon the reports submitted and read by him along with his one self-imposed restriction that at least one institution in each of the eight educational districts be visited among the total of 15 visitations. The dates and locations of these visits were as follows:

1. October 12, 1970 - Davidson County Community College
2. October 13, 1970 - Isothermal Community College
3. October 14, 1970 - Southwestern Technical Institute
4. October 15, 1970 - Rockingham Community College
5. October 15, 1970 - Technical Institute of Alamance
6. November 6, 1970 - Robeson Technical Institute
7. November 6, 1970 - James Sprunt Institute
8. November 10, 1970 - Wilson County Technical Institute
9. November 10, 1970 - Lenoir Community College
10. November 17, 1970 - College of the Albemarle

The chief purpose of these visitations was to gather additional information from the leaders of these programs which, from the reports, appeared to be either/or (1) different from the determined "traditional" approaches, (2) very highly successful, (3) involved a comparatively large number of people, (4) cost a comparatively large sum of money, and (5) showed particular promise of guidance to future efforts of formal articulation as involved in the five Plan I programs.

Among the particular questions asked the people visited, including presidents and/or other administrators of the technical institutes and community colleges were these: (1) Who and what process determined the type of program planned?; (2) Are the Board of Trustees and Board(s) of Education (policy makers) aware of the articulation program?; (3) Has there been any implementation of the suggestions made as a result of the articulation program by presidents and superintendents (administrators)?; (4) What objective or measurable evidence do you have that the articulation program has influenced change in relationships between the technical institute or community college and the local administrative unit?; (5) What suggestions do you have for the improvement of future leadership efforts in articulation by the State Department of Community Colleges, State Department of Public Instruction, and the State Board of Education?; and (6) What suggestions do you have for the Occupational Research Unit as to the compilation and dissemination of a report of the State's total efforts in articulation during 1970 that will be of benefit to individual technical institutes, community colleges, and local administrative units?

22. During and at the conclusion of the 15 visits by Messrs. Blackmon and Manley, they easily agreed that the time and expense expended by them were most beneficial (1) in their getting "a real feel" of various articulation programs, (2) in the preparation and dissemination of a report, and (3) in the portrayal by the State Department of Community Colleges, the State Department of Public Instruction, and the State Board of Education of these three groups' interest in and support of improved articulation between the State's public system of elementary and secondary schools and the public system of technical institutes and community colleges.

23. On November 20, 1970, Dr. Ready sent the following letter to certain presidents of technical institutes and community colleges:

> "The Occupational Research Unit of the Division of Research is now in the process of preparing a report dealing with articulation between high schools and post-high school institutions during the 1970 calendar year. So far, we have received reports from forty institutions but have not heard from yours. It is our belief that even though you did not conduct a program under the guidelines provided by our Department, you did have some contact with the public schools. If this is the case, please let us know, not later than December 1, the type and scope of activity which you conducted. We would like to include your institution in our final report to be shared with the presidents of all institutions in our system."

APPENDIX B

SOME ARTICULATION EFFORTS IN NORTH CAROLINA PRIOR TO 1970

According to the "Progress Report of the Comprehensive Community College System of North Carolina: First Five Years, 1963-1968" published by the State Department of Community Colleges in April, 1969, the predecessors of the presently known technical institutes and community colleges -- "industrial education centers" -- were approved for operation as such by the State Board of Education on April 3, 1958. These were 18 in number and are now known as Asheville-Buncombe Technical Institute at Asheville, Cape Fear Technical Institute at Wilmington, Catawba Valley Technical Institute at Hickory, Central Carolina Technical Institute at Sanford, Central Piedmont Community College at Charlotte, Davidson County Community College at Lexington, Durham Technical Institute at Durham, Fayetteville Technical Institute at Fayetteville, Forsyth Technical Institute at Winston Salem, Gaston College at Gastonia, Guilford Technical Institute at Jamestown, Lenoir Community College at Kinston, Randolph Technical Institute at Asheboro, Rockingham Community College at Wentworth, Technical Institute of Alamance at Burlington, W. W. Holding Technical Institute at Raleigh, Wayne Community College at Goldsboro, and Wilson County Technical Institute at Wilson.

Since the approval of the first public "pre-technical institutes" or "pre-community colleges" by the State Board of Education on April 3, 1958 , numerous informal and formal efforts of articulation have occurred between these institutions and the public high schools of the State. Not only have the public elementary and secondary schools changed, but the roles, responsibilities, and names of the post-high school institutions have changed. This fact, in itself, has probably stimulated the realization of the need for continuous articulation among these institutions operating under the general supervision and administration of the State Board of Education.

Probably the initial forerunner of "recent" articulation efforts was the enactment into law by the North Carolina General Assembly on July 1, 1963, of a system of educational institutions known as industrial education centers, technical institutes, and community colleges. This enactment also provided for a State Department of Community Colleges, operating under the director of the State Board of Education to provide state-level administration of the System. At this time, there were 26 institutions approved for operation, one community college, 20 industrial education centers, and five "extension units" of industrial education centers.

Since the formal beginning on July 1, 1963, of the system of community colleges, technical institutes, and industrial education centers, the number of institutions has more than doubled with there presently being 15 community colleges and 39 technical institutes for a total of 54 institutions. (There are no industrial education centers.)

The rapid increase in the number of institutions has added, undoubtedly, to the efforts of formal articulation prior to 1970. Some of these efforts are reviewed in the remaining part of this section.

1. Included in the July 1, 1963 enactment was the following provision: "The State Board of Education shall appoint an Advisory Council consisting of at least seven members to advise the Board on matters relating to personnel, curricula, finance, articulation, and other

matters concerning institutional programs and coordination with other educational institutions of the State...."

2. The Joint Committee on College Transfer Students is discussed in the December 1, 1967 newsletter of the North Carolina Board of Higher Education, "Higher Education in North Carolina" (Volume II, Number 9).

   "A 1963 study committee of the North Carolina Association of Colleges and Universities (formerly the North Carolina Conference), under the chairmanship of Jay H. Ostwalt of Davidson College, concluded that the lack of consensus among colleges about general education and transfer procedures was "sufficiently great to cause prospective transfer students serious difficulties and, therefore, to justify a serious effort to bring some degree of standardization into them." The study committee recommended "eliminating unnecessary variability in policies and procedures for handling of students transferring."

   The recommendations were especially timely, considering the continual rise in number of collegiate transfers. This fall five percent of the total higher education enrollment in North Carolina consisted of transfers. The percentage is expected to increase as the new community colleges become fully operational. The trend is that two-year colleges more and more will form the broad base of higher education as enrollment climbs in years ahead. This development accentuates the need for a commonly acceptable program of general education in the first two years of undergraduate study involving a minimum loss of credits or time when a student transfers from one institution to another at the end of his sophomore year.

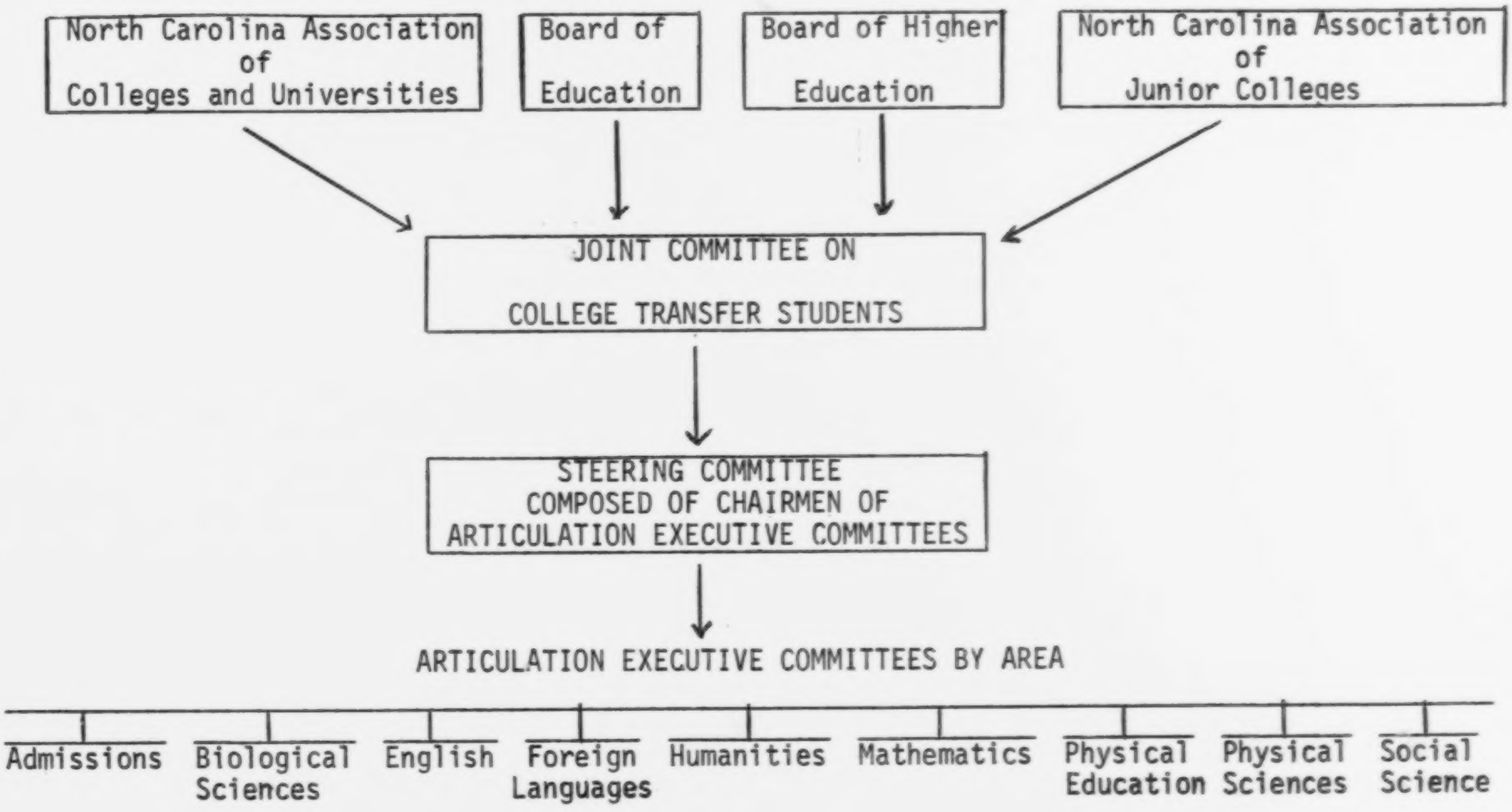
   To deal with the mounting transfer questions, especially the development of a commonly acceptable general education program, the Joint Committee on College Transfer Students was created in January 1965 by the North Carolina Association of Colleges and Universities, State Board of Higher Education, State Board of Education, and North Carolina Association of Junior Colleges. Dr. Ostwalt of Davidson College was appointed chairman of the Joint Committee, continuing his earlier leadership in statewide efforts to solve transfer problems.

   In carrying out its charge, the Joint Committee has engaged in a number of activities. It co-sponsored the appearance of Dr. Leland Medsker, co-author of From Junior to Senior College: A National Study of The Transfer Student, at the 1965 meeting of the North Carolina Association of Colleges and Universities.

   The Joint Committee sponsored two state-wide articulation conferences, the first of which was in February 1966 for all the academic deans of colleges and universities in North Carolina. The main address was given by Dr. Frederick Bolman, Jr., director of special programs for Esso Education Foundation, who spoke on

"Problems of Articulation Between Two-Year and Four-Year Institutions of Higher Education." At this conference each dean was asked to appoint one representative from his institution for membership on each of the following eight articulation study committees: admissions, biological sciences, English, foreign languages, humanities, mathematics, physical sciences, and social sciences. At a latter date an articulation study committee on physical education was added. From approximately 800 North Carolina educators appointed by the deans, the Joint Committee on College Transfer Students selected an articulation executive study committee of 12 to 15 members, including a chairman and a recorder, for each study area. Altogether, approximately 1,000 educators became involved in the total undertaking (see chart for organizational structure).

ORGANIZATIONAL CHART FOR DEVELOPMENT OF ARTICULATION GUIDELINES


North Carolina Association of Colleges and Universities
Board of Education
Board of Higher Education
North Carolina Association of Junior Colleges
JOINT COMMITTEE ON COLLEGE TRANSFER STUDENTS
STEERING COMMITTEE COMPOSED OF CHAIRMEN OF ARTICULATION EXECUTIVE COMMITTEES
ARTICULATION EXECUTIVE COMMITTEES BY AREA
Admissions
Biological Sciences
English
Foreign Languages
Humanities
Mathematics
Physical Education
Physical Sciences
Social Science

The second statewide conference took place in April 1966 when the Joint Committee met with the executive articulation study committees in an all-day conference to organize and develop articulation study plans. Dorothy Knoell of the University of California at Berkeley, co-author of From Junior to Senior College, was the featured speaker and consultant for this meeting.

Subsequently, the articulation executive committees met separately to develop initial drafts. These drafts were reviewed by approximately

> 1,000 disciplinary colleagues of committee members across the state. Revised drafts were then discussed in conferences with the Joint Committee. The deliberations of these conferences led to further refinements and a final report of the recommended guidelines, representing a major achievement in academic cooperation, was approved by the Joint Committee on College Transfer Students on November 1, 1967.
>
> All admission officers and all others concerned with the acceptance of transfer credit are urged to refer to and study the guidelines during the coming year, noting points where revisions may be needed. Suggestions for modifications are solicited by the Joint Committee and should be forwarded to Dr. Corey, Secretary, Joint Committee on Transfer Students, care of the State Board of Higher Education, Raleigh, North Carolina 27605.
>
> All suggestions will be helpful to the Joint Committee as it continues to work with articulation committees in refining guidelines which will be acceptable for implementation by North Carolina's colleges and universities."

On April 14, 1970, the Joint Committee on College Transfer Students reported to the North Carolina Association of Colleges and Universities the information following.

> "The Joint Committee has worked on a continuing basis to refine its recommended guidelines as needed. In August, 1969, the Board of Higher Education approved a baccalaureate in technology degree program at the University of North Carolina at Charlotte. The Charlotte program draws students from two-year technical programs in the Community College system. Other senior public institutions are contemplating bachelor of technology programs with students also being drawn from two-year technical programs. Since the Joint Committee did not consider in its original admissions guidelines the matter of student transfer in technical education programs, the Joint Committee met on several occasions with persons interested and knowledgeable in this area to develop such guidelines. On October 15, 1969, the Joint Committee unanimously recommended that the following two guidelines be added to its original guidelines concerning admissions:
>
> 1. For senior institutions offering the baccalaureate in technology degree:
>
>   a. Except in unusual circumstances students entering the four-year institution should hold the Associate in Applied Science Degree in appropriate areas of technical specialization.
>
>   b. Students holding AAS Degrees in appropriate areas of technical specialization and meeting other institutional entrance requirements should be admitted to the program as junior year students.
>
>   c. Technical graduates seeking to transfer from non-accredited institutions should be accepted provisionally by the senior institution pending satisfactory completion of at least one full quarter or semester of course work, provided they meet other institutional entrance requirements.

2. Courses taken in technical programs may be transferred to a college or university upon validation of applicable course work through the receiving institution's normal procedures.

The Joint Committee is now in the process of developing recommendations for alleviating the transfer problems that come about because of the designation of technical institute courses with the prefix "T". Many of these courses are often comparable to college parallel courses but are not transferable because of the "T" designation.

The Joint Committee is serving as a forum for discussion of complaints concerning student transfers. For instance, at its March 23 meeting it heard representatives from Guilford Technical Institute concerning difficulty of transferring from one dental program to another.

The Joint Committee has assisted in the coordination of a series of workshops to explain programs of the University of North Carolina to representatives of junior colleges. Workshops in testing guidance, fine arts, and biology were held on campuses at Chapel Hill, Greensboro, and Raleigh respectively. These have been so helpful that the Joint Committee has been asked to sponsor on an annual basis articulation conferences for the various disciplines. The Joint Committee is now implementing plans for such conferences.

The Joint Committee is publishing in loose-leaf notebook form the transfer policies and procedures of the senior colleges and universities in North Carolina. Once published, the notebook will be distributed to each institution and updated annually.

The Joint Committee has requested the State Board of Higher Education to report on an annual basis the "fate" of transfer students at the institutions of higher education in the state."

3. A report of an articulation conference held on February 7-8, 1968, at Central Piedmont Community College at Charlotte follows.

"In February, 1968, a two-day conference was held in Charlotte with 97 local occupational directors and State staff of the secondary and post-secondary systems attending. The purpose of the conference was to discuss ways and means of increasing the articulation between secondary and post-secondary programs.

Two presentations were made. Mr. R. Barton Hayes, Chairman, Vocational Education Committee, North Carolina State Board of Education, spoke on "Articulating High School and Post-High School Vocational Education." He suggested six activities be explored:

1. A close liaison between personnel of public schools within service area of an institution,
2. Joint planning of curriculum at high school and post-high school levels,
3. Joint public information activities to present the State's total program of vocational education,
4. A joint effort in evaluation,
5. An exchange of curriculum information, and
6. A joint effort in providing in-service training for professional personnel.

Mr. LeRoy A. Cornelsen, Special Assistant to the Associate Commissioner, Bureau of Adult, Vocational and Library Programs, U. S. Department of Health, Education and Welfare, spoke on "A Balanced Educational Program." Mr. Cornelsen expressed four basic premises that are gaining acceptance:

1. It is less costly to provide programs that prevent problems rather than remedial or correctional programs,
2. Schools must become institutions that "include" rather than "exclude",
3. Schools will become more involved with continuing education and,
4. The role of the school in a technological society will be different from previous role.

The group was divided into six sections and discussions were held on the following topics:

1. What is the present image of vocational education?
2. How can jointly coordinated public information activities be initiated?
3. How could coordinated placement and follow-up services for secondary and post-secondary vocational students be implemented?
4. How could vocational education courses and curriculum planning be effected?
5. How could occupational guidance and counseling services be coordinated?
6. How could coordinated efforts for an effective teacher exchange program be implemented?

4. During the summer of 1968, Caldwell Technical Institute at Lenior conducted an eight-week project involving Caldwell County school counselors. The formal report follows.

"PURPOSE OF THE PROJECT

The 1968 Summer Counseling and Guidance Project was one of many services offered the young people of the county by Caldwell Technical Institute.

In the development of the project an attempt was made to give realistic emphasis to the many opportunities available to the youngsters and adults of the county by providing extended guidance services of a nature which took the counselor into the home, place of employment, or downtown billiard hall, to seek out the underachiever, dropout, and regular school graduate to provide him with first-hand information regarding career opportunities and benefits of education as well as financial aid information, application procedures, courses offered at different schools, and an opportunity to visit particular schools with the counselor.

In requesting funds for the project several important factors were considered and are as follows:

1. The 50% drop-out rate in Caldwell County Schools.
2. The low 23% factor of regular college attendance from the Caldwell County Schools.
3. The 10% attendance factor, from the county, of students attending technical or trade schools.

4. The 12,000 adults with only an eighth grade education in Caldwell County.
5. The fact that several weeks of "hard labor" sobers a student's attitude toward the world of work.
6. Many students decide on technical or trade training during the summer, after graduation.

PROCEDURES

The regular Caldwell County counselors were employed for eight weeks with one person employed for three weeks in the Lenior area. These counselors had a relatively free situation from which to work and were assigned the task of contacting and counting for every high school graduate in the county. Their second task was to follow-up on drop-outs and if possible, guide them back into a training program.

Their third task was to inform as many parents as possible of the opportunities available for themselves and their children in the immediate area.

The only restrictions imposed were a regular weekly meeting at Caldwell Technical Institute and the filling out of data cards for all graduates and contacts for the Institute.

At all times the counselors were cautioned of their responsibility to the student and not to Caldwell Tech. In other words, the counselors felt equally responsible to area educational institutions, not just CTI. An example of this is reflected in the fact that 14 county students that had made no previous plans to attend Western Piedmont's college parallel courses applied and enrolled as a result of CTI's counseling project.

EVALUATION

Reports filed by the counselors show that 355 students and adults were contacted by mail or phone: 151 more students and adults were visited in person, many at night at their homes. It is most difficult to determine the exact number of those contacted who enrolled at CTI as a direct result of the summer program. Some had already mailed applications to the Institute but had not completed the entrance requirements; the counselors encouraged that this be done. Others had completed the paper work, been accepted but were still not completely sure about actually enrolling; the counselors were able to persuade some of these to choose advanced training over immediate employment.

Further, there is no way to measure the effectiveness of the counselor contacts upon those persons who did not seek admission immediately to CTI. Months or even years may elapse before certain individuals decide to return to school.

The five "summer" counselors felt that they had influenced, to some degree, an estimated 87 persons to become part of the current CTI student body.

Written evaluative statements from those employed are as followed:

Mrs. Hariett Lipe, Gamewell-Collettsville High School

I know we doubled our enrollment at CTI for the students from the Gamewell-Collettsville High School areas. Perhaps another year, with the new courses, and knowledge we have of the courses available, we may be even more successful.

Mr. Lewis Shade, Lenoir High School

I think last summer's project was a very valuable program. Many students who had dropped from high school were encouraged and given a chance to pursue a new start by finishing high school or by entering an industry related training course.

Several students who had graduated from high school were given scholarships or loans. This financial aid helped them to continue training in their area of interest.

I know that many interested students were reached, helped and benefited. Therefore, in my opinion, reaching and helping those who had given up hope of graduation from school were the most valuable assets of the project.

Mr. Sinclair Deal, Granite Falls High School

I think that the total program, county wide, was most beneficial to counselors, students, community and CTI. In the future, because of need, I think it will increase in importance. However, I feel that funds should be state allotted.

Miss Sara Moore, Hibriten High School

The project gave me an opportunity to do some extra "pushing" or encouraging those students who were undecided when school closed. It provided me with a better understanding of the Institute and allowed me greater opportunities for introducing the Institute's courses to people of all ages in my own community through tours and visits. I feel that from the information the young people and adults who came for the tours gained many of them will take advantage of the Institute's many opportunities. I already know that several have come as a result of the visits.

Mr. Cecil Clark, Hudson High School

Such a project provides counseling services for (a) service men discharged or about to be discharged (b) former students and people in the community (c) students rejected from colleges who must make other selections or consider a junior college or a technical institute (d) students whodecide during the summer to begin the initial investigation of higher learning (last July and August seven of the recent graduates decided to go to Western Piedmont; they made application and were accepted).

The project also provides (a) time to complete transcripts (Were this task left until after the secondary school begins, the counselor would not have time to complete and return the material for some weeks.) (b) opportunities for counselors to understand problems of students and the community through the home visits.

RECOMMENDATION

The student personnel staff at CTI feels that the project resulted in

1. The establishment of excellent rapport with the county counselors.
2. The improvement of public relations throughout Caldwell County.
3. The enrollment of more students at CTI.

4. The completion of many student applications which would not have been completed at registration time.
5. The continuing support of the counselors this year.
6. The creation of a foundation upon which future student bodies will be built (far reaching influence upon students yet to enroll).

Further County benefits:

1. Parents had an opportunity to talk with counselors (day and evening).
2. Kept the qualified counselors from seeking employment elsewhere.
3. Aided many Caldwell County students in seeking admission to other colleges.
4. Aided in disseminating all types of information to county families.
5. Aided the present high school students by providing summer counseling for them.

In view of the above, the CTI Student Personnel staff recommends that if funds are available the project be continued either full or part-time."

A similar project was held during the summer of 1969 with five high school counselors on an extended schedule of seven or eight days to allow for extensive visitation of employment firms in the area. Recommendations included the planning and conducting of another similar project during 1970 with an increased number of counselors involved. (A 1970 project was completed involving eight high school counselors and five personnel from Caldwell Community College.)

5. During the summer of 1968, Guilford Technical Institute at Jamestown provided an intensive workshop of two weeks duration for 15 junior and senior high school counselors in Guilford County. Financial support for the program came from local funding, and the purpose was to acquaint each counselor with "the vocational and technical courses available, requirements for entrance, business and industrial opportunities, and job needs in the county." The workshop members received a $500 stipend and two units of certificate renewal credit.

   A similar program was held during the summer of 1969 which lasted for four weeks. Funded from a grant by the Sigmund Sternberger Foundation, 25 people were involved -- 16 counselors, five mathematics and science teachers, and four principals. These participants received the same stipend and units of certificate renewal credit as those of the 1968 workshop.

   During both years, a report indicated "the morning sessions were used to provide information on relationship of secondary and post-secondary educational systems; local and State administrative patterns; programs available at institutions in adjacent counties; and an overview by business and industrial representatives of needs, opportunities, and jobs. The afternoon sessions were utilized in visiting school shops and laboratories, visiting business and industry, and contacting high school graduates and dropouts that had not made a commitment for further education."

(During 1970, Guilford Technical Institute conducted its third annual workshop in counseling that lasted for four weeks. 25 participants included counselors, vocational coordinators and teachers, and administrators. In addition, there were approximately 75 representatives from business, industry, community agencies, and education who contributed professionally to the workshop. Stipend and credit arrangements were identical to the two prior years.)

6. On September 18, 1968, a dinner meeting of the professional staff of the Division of Vocational-Technical Education of the State Department of Community Colleges and the professional staff of the Division of Vocational Education of the State Department of Public Instruction was held at The Country Squire of Warsaw and James Sprunt Institute at Kenansville. The stated purpose of the meeting was to hear the Chairman of the State Board of Education, Dr. W. Dallas Herring, discuss articulation of vocational education in North Carolina.

7. Wilkes Community College of Wilkesboro developed a teacher aide program during 1968, and a brief report of this activity follows.

"Through joint planning between Wilkes Community College and the public school officials of Alleghany, Ashe, Alexander, Wilkes Counties, and North Wilkesboro City, a four-quarter program for training teacher aides for the public schools was developed in 1968. The following served as an advisory committee in the development of this program:

Mr. Rex Whittington, Assistant Superintendent, Wilkes County Schools
Mr. Pat Day, Title Director, ESEA, North Wilkesboro City
Mr. Frank James, Superintendent, Ashe County Schools
Mr. John Woodruff, Superintendent, Alleghany County Schools
Mr. Dwight Eisenhour, Superintendent, Alexander County Schools

The curriculum developed through and approved by the Advisory Committee was submitted to the State Board of Education and approved by them on November 7, 1968. Subsequently this curriculum was implemented by the College and is in current operation. (Incidentally, Wilkes was the first institution in North Carolina to be approved for a Teacher Aide Program.)

This program has been and is continuing to be one of the great value in providing needed services to the public schools and could not have been put into realization without close cooperative efforts with the public schools."

8. During the summer of 1969, Wilkes Community College at Wilkesboro conducted a workshop for high school counselors. A brief report of this activity follows.

"During the period June 9 through June 27, the College sponsored a summer workshop for high school counselors. The purpose of the workshop was to provide counselors with first hand knowledge and "hands on" experience that would inter-relate high school programs with the community college curriculums and the employment opportunities in technical and vocational fields.

Twenty counselors from 16 high schools, attended the workshop. They came from Alleghany, Ashe, Avery, Caldwell, Surry, Watauga, Wilkes and Yadkin counties. All had the full consent and encouragement of their superintendents and principals.

Nineteen different industries and businesses were visited, and the counselors were introduced to key management personnel. Exchange of information and ideas keynoted each such meeting and served to establish rapport between the industry, public schools and the College."

It was recommended that a similar program be held during the summer of 1970 and the invitations be tendered to vocational, business, science, mathematics, English, and home economics high school teachers.

9. A report of the Summer Data Processing Institute sponsored by Central Piedmont Community College at Charlotte follows:

"During June 16-28, 1969, a graduate Data Processing Course was offered on a state-wide level to all interested teachers who had the desire to learn fundamentals about data processing. This course was offered through the extension division of North Carolina State University granting three hours of graduate credit.

The objectives of this course were:

1. To assist in developing the knowledge and skill necessary for teaching Data Processing on the secondary school level utilizing the computer as the object of instruction.

2. To assist in the development and understanding of instructional media and materials, course content, and development of a basic curriculum guide.

There were 40 teachers from throughout the state of North Carolina, Virginia and Georgia who completed the course. A class was held each morning providing a lecture opportunity and each afternoon providing a hands-on learning experience with the data processing machines. Forty-one teachers enrolled in the course with one person not completing the course because of home obligations.

The faculty members of Central Piedmont Community College participated by offering instruction and providing facilities at the college for classroom purposes. In the afternoons the participants in the institute were disbursed to four different locations allowing the group of 40 to have approximately ten in each location to provide more opportunity for hands-on experience. Three Charlotte-Mecklenburg high schools were used with each school having a 1620 computer and keypunch machines. The fourth location was at Central Piedmont Community College utilizing the same type machines there.

The curriculum for the course was devised jointly by the data processing teacher of Charlotte-Mecklenburg Schools and the data processing teacher of Central Piedmont Community College. The institute was evaluated by the participants who felt their time spent resulted in a most meaningful learning experience.

Much interest has been indicated about offering a follow-up course as well as a repeat of the same course."

10. Since the approval by the State Board of Education on April 3, 1958, of the first industrial education centers, the annual State Plan for Vocational Education submitted to the Office of Education of the U.S. Department of Health, Education, and Welfare has reflected plans for both high school and post-high school institutions.

    Since the establishment of the State Department of Community Colleges only July 1, 1963, the development of the annual State Plan for Vocational Education has been a joint responsibility of the two State-level education departments under the State Board of Education -- the State Department of Public Instruction and the State Department of Community Colleges. In 1969, for example, the State Plan for Vocational Education for Fiscal Year 1970 was developed by a task force consisting of representatives from (1) the State Department of Public Instruction, (2) the State Department of Community Colleges, (3) the Research Coordinating Unit in Occupational Education, and (4) the Controller's Office of the State Board of Education. (In 1970, the State Plan for Occupational Education for FY 71 was developed in the same manner as that for FY 70 with the additional involvement of the State Advisory Council on Vocational Education.)

11. On December 31, 1969, the Division of Occupational Education of the State Department of Public Instruction submitted a proposal to the U.S. Commissioner of Education under the provisions of Part D (Exemplary Programs and Projects) of the Vocational Education Amendments of 1968. Entitled "A Project to Demonstrate Comprehensive and Articulated Programs of Occupational Education," the project directors were to be Mr. A. G. Bullard, Associate Director of the Division of Occupational Education, and Dr. W. J. Brown, Jr., Director of the Division of Research.

    Individuals involved in the preparation of this proposal represented (1) the State Department of Public Instruction, (2) the State Department of Community Colleges, (3) the State Advisory Council on Vocational Education, (4) the University of North Carolina at Greensboro, (5) the University of North Carolina at Charlotte, (6) the North Carolina Agricultural and Technical State University, (7) East Carolina University, and (8) the Charlotte-Mecklenburg Administrative Unit.

    One of the four objectives of the project was "to provide for articulated programs of occupational education from the middle school through post-secondary institutions." This objective was identified as "Sub-Project D" with the title, "The Development of an Exemplary Project Demonstrating the Articulation of Secondary and Post-Secondary Programs in Occupational Education." The project directors were to be Mr. R. A. Mullen, Associate Director of the Division of Occupational Education of the State Department of Public Instruction, and Mr. A. J. Bevacqua, Director of the Division of Occupational Education of the State Department of Community Colleges.

The specific objectives of this project were as follows:

"1. To demonstrate the effectiveness of cooperative planning of occupational education programs in one or more geographic area(s).
2. To provide comprehensive occupational education programs in one or more geographic area(s) so that persons of all ages in all communities of the area(s) have ready access to vocational training or retraining which is realistic in the light of actual or anticipated opportunities for gainful employment.
3. To provide a continuum of occupational exploration and training programs which provide progression in skill development, which build upon prior experiences, which minimize duplication, and which reflect the shift to post-secondary education as the terminal programs for a majority of young people.
4. To jointly plan secondary and post-secondary occupational education operations in such areas as analysis of manpower needs, curriculum development, program enrollments, matriculation, and inservice education.
5. To develop guides for jointly planning program enrollments, curriculum development, matriculation, in-service education, and post-secondary waiver of course based on secondary achievement levels.
6. To assure a continuum of occupational education experiences for youths who have academic, socioeconomic, or other handicaps."

The specific activities of this project were to be the following:

"1. Development of joint planning efforts which reflect articulation efforts.
2. Development of a common data bank for program planning and evaluation.
3. Cooperative analysis of educational and manpower needs.
4. Coordinated program planning.
5. Joint curriculum development in which a student moves sequentially from secondary to post-secondary occupational education programs.
6. Joint development of a continuum of program and services for persons with academic, or other handicaps.
7. Articulation of programs, including transfer of credit, between comparable institutions within a geographic area.
8. Joint planning of inservice education programs for counselors, teaching personnel and administrative personnel.
9. Joint planning of services to students and prospective students (including adults).
10. Development of a comprehensive and articulated occupational education evaluation system to include evaluation of program offerings, program process, and program effectiveness."

The plan or procedure for implementing the project was to form a consortium of school administrative units and post-secondary institution(s) in the educational impact area(s) who would identify areas of articulation and plan for their implementation. To accomplish this, a workshop on articulation would be planned to initiate the articulation efforts. The workshop would be followed by periodic review and planning sessions by the consortium.

(The proposal was not funded by the U. S. Commissioner of Education, and Sub-Project D was not implemented with other funds.)

12. Since the initial, 1960 planning of courses and curriculums in agriculture and natural resources in the industrial education centers with the first resulting programs starting in 1961, there has been much evidence of cooperative and joint effort between the professional staff of Agricultural and Biological Education of the State Department of Community Colleges and the professional staff of Agricultural Education of the State Department of Public Instruction. The same has been true of the instructors of agricultural and biological education in the technical institutes and community colleges and the teachers of agricultural education in the high schools.

    For example, during the years of 1965-1969, formal joint State staff meetings were held almost monthly with informal meetings usually held weekly. In addition, each of the 12 State-level Curriculum Advisory Committees for Agricultural and Biological Education of the State Department of Community Colleges had a representative from Agricultural Education of the State Department of Public Instruction. Simultaneously, teachers of agricultural education in some high schools served on local agricultural and biological education curriculum committees for technical institutes and community colleges.

    The highlight of cooperative effort, probably, on the State level came during early 1969 when a "Five-Year Agricultural Education Plan" was in the process of being developed by (1) the Agricultural Education staff of the State Department of Public Instruction, (2) the State Consultant of Agricultural and Biological Education of the State Department of Community Colleges, (3) the Agricultural Education staff of North Carolina State University, and (4) the Agricultural Education staff of North Carolina Agricultural and Technical State University.

    Although the plan was never finalized, the inputs of such greatly assisted the State Supervisor of Agricultural Education of the State Department of Public Instruction and the State Consultant of Agricultural and Biological Education of the State Department of Community Colleges to present a joint program plan of agricultural education beginning in the upper elementary grades and continuing through the two-year, Associate in Applied Science degree curriculums offered by technical institutes and community colleges for use in developing the State Plan of Vocational Education for FY 70.

    This was the first formal effort at the State level to develop an effective, total program of occupational education in one occupational field with a minimum of duplication but a maximum of "gap filling," "dove tailing," and cooperative effort toward the achievement of a common objective.

    Five particular outcomes of the "Five-Year Agricultural Education Plan" efforts are given on the following pages of this part.

1. "Definitions of Pre-Vocational Education, Vocational Education and Technical Education in Agriculture as used by the State Agricultural Education Leadership in North Carolina.

   Pre-Vocational Education in Agriculture

   Such occupational education that is concerned largely with the study of occupational choice and career development. Educational programs would involve the students in study and activities appropriate to their occupational maturity and development. An important aspect would be the understanding of a self-concept and its effect upon occupational development. The result should be an understanding of self in relation to making a place in the world of work.

   Vocational Education in Agriculture

   Such occupational education that is concerned largely with the development of knowledge, understanding, skills, attitudes, and leadership abilities in the broad field of agriculture. Emphasis is upon the development of a person for (1) entrance into a vocational level occupation (skilled or semi-skilled) or one of a low-management level and/or (2) the preparation of a person for technical or professional level education in agriculture.

   Technical Education in Agriculture

   Such occupational education that is concerned largely with the development of knowledge, understandings, skills, attitudes, and leadership abilities in the broad field of agriculture. Emphasis is upon the development of a person for entrance into a technical level occupation (semi-professional) or one of a mid-management level. (Although this education is designed for entrance into employment, certain courses may be accepted by a four-year college or university as transfer credit, usually on the basis of qualifying examination.)"

2. "Organizational Responsibilities for Occupational Education in Agriculture"

   (See chart on page B-16)

3. "Agricultural Education in North Carolina"

   (See chart on page B-17)

4. "Proportion of Two Types of Skills in Educational Programs for Different Occupational Levels"

   (See chart on page B-18)

5. "North Carolina Educational Opportunities For Preparing Careers in Agriculture & Natural Resources"

   (See fold-out chart on page B-19)

Organizational Responsibilities for Occupational Education in Agriculture

Levels of Curricular Programs for All Clientele	Responsibilities
Pre-Vocational	Elementary and Secondary System
Vocational	Elementary and Secondary System* and Community College System
Technical	Community College System

Clientele of Short Course Programs of Either Vocational or Technical Level	Responsibilities
Farmers	Elementary and Secondary System**
Persons in other Agricultural Occupations	Community College System***

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* Assumes primary responsibility. The Community College System will ordinarily provide only those curricular programs of a vocational level which this system cannot effectively provide because of special facility and equipment needs, organization of instructional schedule, size of school, number and competencies of instructors, etc.

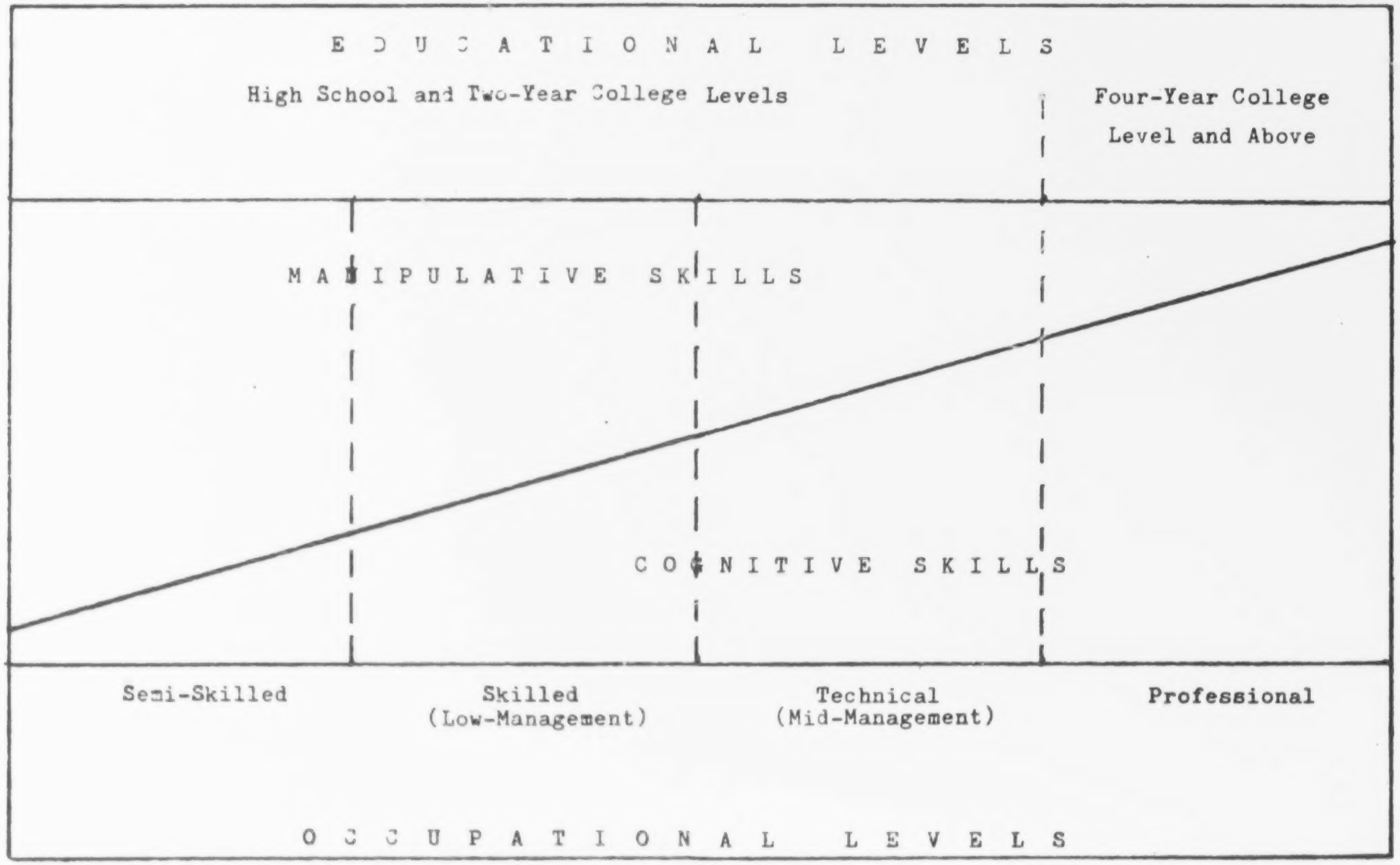
** The Community College System could assist or co-sponsor such educational programs.

*** The Elementary and Secondary System could assist or co-sponsor such educational programs.

AGRICULTURAL EDUCATION
IN
NORTH CAROLINA

THE PEOPLE	AND	THE PROGRAMS
In Elementary Schools	7th Grade	Agriculture in Our Life
	8th Grade	Orientation to Agricultural Occupations
In High Schools	9th Grade	Introduction to Agriculture
	10th Grade	Agricultural Science and Mechanics
	11th Grade and 12th Grade	Agricultural Production Agricultural Management Agricultural Construction Agricultural Machinery and Equipment I, II General Horticulture Ornamental Horticulture and Landscaping I, II General Forestry Pulpwood Production Crop and Soil Technology Livestock and Poultry Technology Agricultural Chemicals Agricultural Business Operation and Management Agricultural Sales and Services I, II Agricultural Conservation and Recreation Special Needs in Agriculture
In Technical Institutes and Community Colleges	Certificate (3 Months)	Farriering
	Diploma (12 Months)	Dry Kiln Operating Log Sawing Lumber Inspecting Saw Filing
	Degree of Associate in Applied Science (A.A.S.) (21 Months)	Agricultural Business Technology Agricultural Chemicals Technology Agricultural Equipment Technology Agricultural Research Technology Fish and Wildlife Management Technology Floral Design and Shop Management Technology Food Processing Technology Forest Management Technology Forest Recreation Technology Ornamental Horticulture Technology Poultry and Livestock Technology Recreational Grounds Management Technology Soil and Water Conservation Technology Veterinary Medical Technology Wood Products Technology - Primary Wood Products Technology - Secondary
Desiring Continuing Education	High Schools Technical Institutes Community Colleges	Individual Instruction Short Courses General Programs Agricultural Seminars Farmers Clubs Veteran Farmer Education Community Development Clubs Educational Television

Proportion of Two Types of Skills in Educational Programs for Different Occupational Levels*



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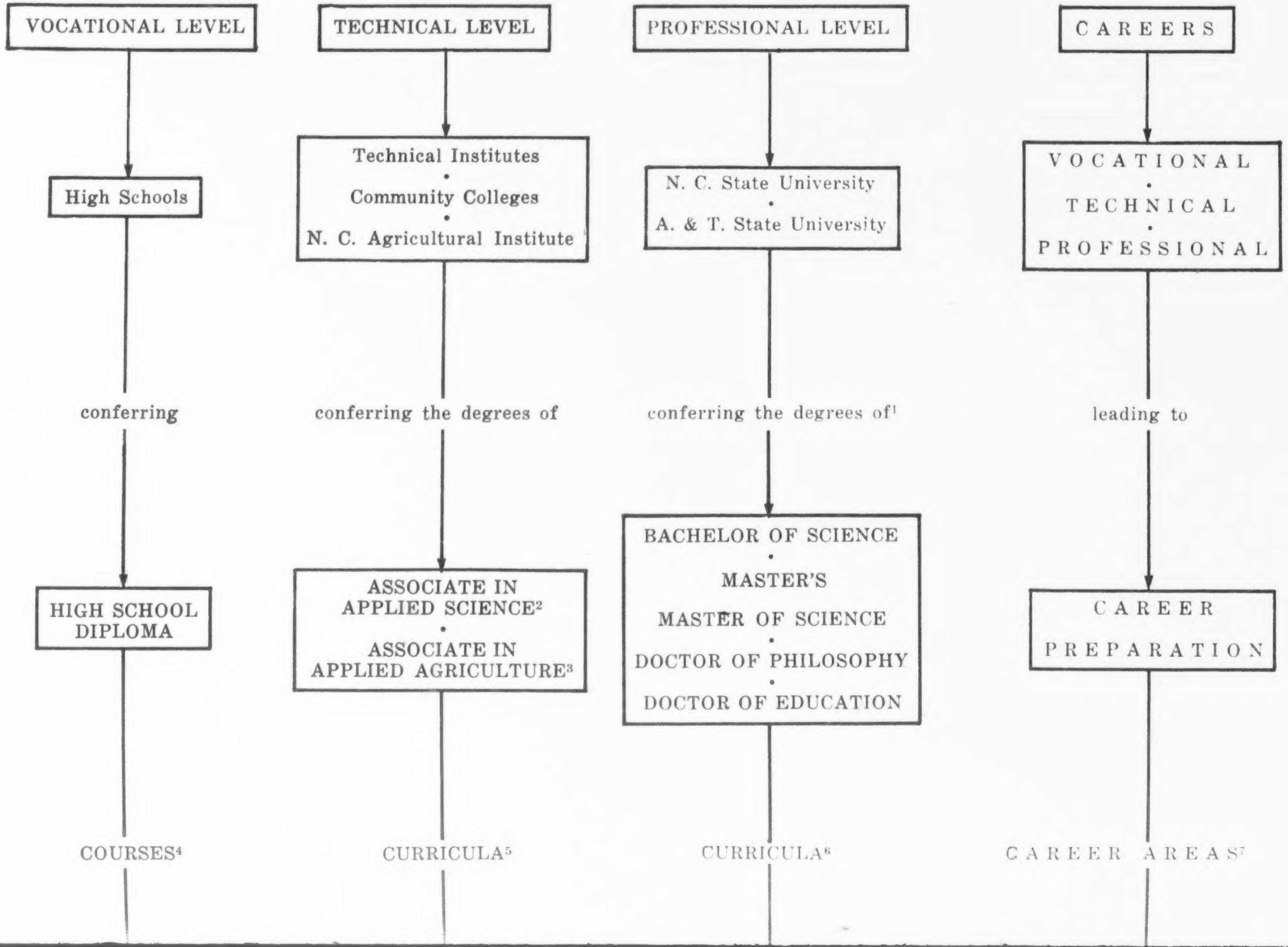
*Using Curriculum Developments, Association for Supervisors and Curriculum Development, National Education Association, Washington, D. C. 1963. Adapted by Fred W. Manley.

North Carolina Educational Opportunities For Preparing Careers in Agriculture & Natural Resources



VOCATIONAL LEVEL

High Schools

conferring

HIGH SCHOOL DIPLOMA

COURSES[4]

TECHNICAL LEVEL

Technical Institutes • Community Colleges • N. C. Agricultural Institute

conferring the degrees of

ASSOCIATE IN APPLIED SCIENCE[2] • ASSOCIATE IN APPLIED AGRICULTURE[3]

CURRICULA[5]

PROFESSIONAL LEVEL

N. C. State University • A. & T. State University

conferring the degrees of[1]

BACHELOR OF SCIENCE • MASTER'S • MASTER OF SCIENCE • DOCTOR OF PHILOSOPHY • DOCTOR OF EDUCATION

CURRICULA[6]

CAREERS

VOCATIONAL • TECHNICAL • PROFESSIONAL

leading to

CAREER PREPARATION

CAREER AREAS[7]

Introduction to Agriculture
Agricultural Science and Mechanics
Agricultural Production
Agricultural Management
Agricultural Business Operation and Management
Agricultural Chemicals
Agricultural Construction
Agricultural Machinery and Equipment I
Agricultural Machinery and Equipment II
Agricultural Sales and Services I
Agricultural Sales and Services II
Crop and Soil Technology
General Forestry
General Horticulture
Livestock and Poultry Technology
Ornamental Horticulture and Landscaping I
Ornamental Horticulture and Landscaping II
Pulpwood Production
Special Needs in Agriculture

Agricultural Business Technology
Agricultural Chemicals Technology
Agricultural Equipment Technology
Agricultural Research Technology
Farm Equipment Sales and Service
Field Crops Technology
Floral Design and Shop Management Technology
Food Processing Technology
Forest Management Technology
Forest Recreation Technology
General Agriculture
Livestock Management and Technology
Ornamental Crops Technology
Ornamental Horticulture Technology
Pest Control
Poultry and Livestock Technology
Primary Wood Utilization Technology
Recreational Grounds Management Technology
Soil and Water Conservation Technology
Soil Technology
Wildlife Management Technology
Veterinary Medical Technology

Adult Education
Agricultural Business
Agricultural Education
Animal Science
Biochemistry
Biological and Agricultural Engineering
Biological Science
Botany
Conservation
Crop Science
Economics
Entomology
Food Science
Forestry
Genetics
Horticultural Science
Microbiology
Natural Resources Recreation Management
Plant Pathology
Poultry Science
Pre-Medical Services
Pre-Veterinary
Pulp and Paper Technology
Recreation and Park Administration
Sociology and Anthropology
Soil Science
Wood Technology
Zoology

PRODUCTION
Food
Fiber
Oil
Seeds
Forest Products

EDUCATION
High Schools
Technical Institutes
Community Colleges
Universities
Ag. Extension Service
Governmental Agencies
Foundations
Industry
International Tech. Aid

SERVICES
Federal
State
Private
Foreign

BUSINESS
Banking
Credit
Insurance
Grading
Land Appraisal
Marketing
Merchandising
Packaging
Public Utilities
Transportation
Sales
Warehousing

CONSERVATION
Forest
Soil
Water
Wildlife

RECREATION
Game Preserves
Golf Courses
Parks
Playgrounds

COMMUNICATIONS
Advertising
Exhibits
Motion Pictures
Photography
Publications
Public Relations
Radio
Television

RESEARCH AND DEVELOPMENT
Conservation
Crops
Equipment
Machinery
Forestry
Livestock
Management
Marketing
Methods
Pest Control
Processing
Production
Rural Sociology
Soils

INDUSTRY
Machinery
Fats and Oils
Feed
Fertilizer
Food
Forest Products
Fuel
Herbicides
Pesticides

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[1] Not all conferred at both institutions
[2] Conferred by the technical institutes and community colleges
[3] Conferred by the N. C. Agricultural Institute
[4] Not all courses (except the first two) offered by all high schools
[5] Not all curricula offered by all institutions
[6] Not all curricula offered by both institutions

[7] Adapted from a publication prepared by a special committee of the Resident Instruction Section, Division of Agriculture, American Association of Land Grant Colleges and Universities

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Department of Community Colleges
State Board of Education
Raleigh, North Carolina 27602
June, 1968

APPENDIX C

A REVIEW OF SOME RESEARCH ON ARTICULATION IN THE UNITED STATES

A computer search was completed of documents contained by the Educational Resources Information Center (ERIC), the national information system for education, with the key descriptor being "Articulation (Program)." Additionally, other documents concerning articulation and similar topics were located.

In this appendix, 12 documents are reviewed. Such review information for many are derived from the formal document or report resumes. The reviews follow.

1. ED 023 856. Guide to Structure and Articulation of Occupational Education Programs (Grades 7 through 12 and Post-High School). Oregon State Department of Education, Salem Division of Community Colleges and Vocational Education. 1968. 109 pages.

"Intended as a flexible instrument, this guide suggests approaches for providing (1) meaningful occupational education throughout the junior high and high school structure, (2) opportunities for attaining entry level occupational competency in the secondary education complex, and (3) occupational education at the high school level which is appropriate to continuation beyond high school. On the basis of (1) the adoption of the occupational cluster concept which involves its grouping of occupations with identical or similar skill and knowledge requirements, (2) the implementation of a program of occupational exploration in grades 7 through 10, (3) the availability of adequate guidance and counseling, and (4) the provision of introductory courses at the ninth and 10th grade levels, a pattern of occupational education for secondary schools is suggested and approaches to organization, content, scope, and sequence of 12 cluster-based occupational curriculums are presented. The roles of high school occupational programs are identified as providing specific preparation for those who drop out and those who do not continue beyond high school, and a complementary learning experience to those who continue their occupational education. The alignment of the 12 curriculums with typical community college programs is illustrated, and the development of agriculture education from grade 9 through the community college program is presented schematically. (JK)"

Specific quotations from Section VI of this document, entitled "Program Articulation: Secondary and Community College," follow.

"High School and Community College Roles in Occupational Education

Increasing development of occupational education in public education settings inevitably brings questions. Among the more prominent of these are questions concerning the level or levels at which occupational education should be offered and, if it is to be offered at more than one level, the relationship of occupational education at one level to that at another.

For the reasons outlined below, the position taken here is that programs in occupational education are urgently needed at both secondary and community college levels. (As has been stated in Section I, occupational exploration and orientation is needed much earlier.)

Secondary Programs

The basic purpose of high school programs in occupational education is to serve the great numbers of students whose needs are not being met in the traditional structure of secondary education. In our college-oriented society, the fact that more than one half of our young people do not attend a college of any sort seems often to go unnoticed. These youngsters especially need occupational education as a vital part of general education if they are to become productive citizens in a complicated society. In the context of serving these needs, high school programs neither complement nor overlap the purpose and function of any post-high school educational unit. They have as one of their responsibilities the specific occupational education of young people who do not continue beyond high school, or who drop out before graduation from high school. At the same time they should provide education incentive for many who are potential high school dropouts.

In addition, occupational education in the high school is designed to complement post-high school level, either in the classroom or on the job. Certainly, some youngsters who would never have attempted advanced training will be motivated to do so solely because of their experiences in secondary programs. In this context, secondary occupational education does play a complementary role and it needs to be carefully articulated with post-high school opportunities for education and training, both in the school and on the job.

Clearly, the role and functions of occupational education at the high school level are unique and specific to meeting the job preparation needs of large numbers of secondary students. At the same time, they are complementary to programs of advanced and continuing occupational education and training.

Programs in the Community College

Occupational education for young people who have left high school, either as graduates or dropouts, and for adults who need upgrading or retraining logically belongs in the community college.

While high school programs generally should be centered upon the skills and knowledge common to occupations comprising a cluster and required for entry into an occupational "area" or "family," the technical-vocational programs at the community college are designed to be more specific and specialized. Some of them are highly sophisticated.

Typical of occupational education offerings of the community college are:

(1) Semi-professional, non-engineering programs (for example, those in the paramedical field).

(2) Engineering technician programs.
(3) Programs for industrial occupations that are highly technical.
(4) High level programs in office and distributive occupations.
(5) Programs for Technical Agriculture Occupations that relate to both the production and the agri-business phases of agriculture.
(6) Partial responsibility (shared with the high school) for providing training for skilled trades and office occupations, and for providing semi-skilled training for out-of-school youth and adults.
(7) Extension classes for those already employed, including apprentices.

Suggested Criteria for Deciding Program Level

The preceding does not, of course, fit all operating situations at either the secondary or post-high school levels. It may, in fact, be impossible to devise precise criteria for determining program level that will be applicable in all cases. However, the criteria listed below, which have been adapted from a paper prepared by Dr. Lynn A. Emerson*, should be helpful in identifying programs for inclusion at the community college level.

A program may best be offered at the community college level:

(1) If the occupation involved is generally classified as semi-professional.
(2) If the occupation involved demands greater maturity at entry than the average high school graduate possesses.
(3) If the prestige of a community college is needed to attract the type of student required for the program.
(4) If on-the-job learning time required for development of full occupational competence is substantially lower for the graduate of a community college program as compared with that for a high school graduate in the same field.
(5) If the curriculum content is of a level and type that requires high school graduation and completion of specific courses as a minimum foundation for entry.
(6) If the area involved seeks to meet the needs of persons who left or graduated from high school with no special occupational training and later seek such training to prepare themselves for better jobs.
(7) If there is a need in the community for a wide range of evening courses which require technical equipment not normally available in high school occupational programs.

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*Dr. Emerson, Professor Emeritus of Industrial Education, Cornell University, has long been recognized as one of America's foremost authorities in technical-vocational education. Since his retirement from Cornell, he has served on many federal and state projects and committees, including the President's Panel of Consultants on Vocational Education.

To summarize, both the high school and the community college have unique and indispensable roles to fulfill if the occupational needs of the state are to be met. If the essential articulation between high school and post-high school programs is to be achieved, there needs to be a clear identification of and adherence to the objectives of each.

Articulation of Occupational Education Programs

As used here, articulation in education means the process of transfer and progression of students from one level of educational offerings to the next higher level. Clearly, effective articulation is needed both within single educational units and between separate education agencies wherever joint concerns and responsibilities exist. The primary concern here is with the latter aspect of articulation.

Effective articulation would insure smooth transition for students, continuity in the educative process, efficient development of student abilities, and maximum use of resources. It would minimize confusion, conflict, and needless readjustment and duplication."

2. ED 025 628. A Master Plan for Occupational Education in Metropolitan Denver (Position Paper). Metropolitan State College, Denver, Colorado. 1968. 19 pages.

Specific quotations from the "Summary" follow.

"A plan for a complete program of occupational education for the Denver Metropolitan area is provided. With the great diversity of occupational fields, some means needed to be developed to identify which programs should be in high schools, in the community colleges and which offered at Metropolitan State College.

This proposal contains twelve criteria when applied to a particular occupational need will provide guidelines to designate which level of school it should be offered.

There then follows illustrations of clusters or families of occupations covering the spectrum of preparation from high school through four years of college.

It is recommended that a coordinating council for occupational education be established involving the high schools, the Denver community college and Metropolitan State College. This council to develop a "Tech-Prep" high school program and provide for articulation from high school, junior college, state college."

Specific quotations from selected parts of the document follow.

"TERMINOLOGY

A program for occupational education must be defined as to breadth and scope. The unskilled individual who is fortunate enough to be employed may acquire his vocational competence on the job. Another approach to vocational preparation is through an apprenticeship program. Occupational education could obviously include preparation for the professions, law, medicine, dentistry, etc. These are certainly vocational education examples but are not within the framework for occupational education as outlined herein. The term occupational education and occupational programs are used in the following context.

Occupational Education

The programs described herein are limited to those occupations in which preparation may be achieved in the latter years of high school, in a two-year comprehensive community college, and up to four years in Metropolitan State College. It also includes up-grading and continuation education.

Occupational Programs

Preparation for employment, vocational education, or occupational education are all used in a closely related manner. Some difference may exist by the type of the student taking the program. A high school girl may be in a pre-employment program to become a key punch operator. For a typist in an office complex, courses in shorthand may be continuation education. A police officer seeking a top level administrative position may want to enhance his opportunities by seeking a baccalaureate degree. To do this he chooses to be a part-time student while employed full-time. Occupational or vocational education is used to describe all of these.

CRITERIA FOR LOCATION OF PROGRAM

(Role and Function of Institutions)

Within the metropolitan area of Denver, including the contiguous counties, a complete program for occupational education is feasible and practical. It is possible to define, by institution, occupational education. The high schools in the urban and suburban area are fully capable of providing numerous pre-employment, entry-level vocational programs. The comprehensive community colleges planned for the metropolitan area will fill a void that has existed in the spectrum of occupational education. Metropolitan State College, as a multi-purpose college, completes the chain of educational institutions concerned with preparing people for the world of work.

It must be recognized that no well defined dimension exists that restricts a program to only one level of education. There are degrees of concentration, breadth, and sophistication that produce inter-institutional relationships. There are significant advantages of this, for the student. One of the frustrations facing young people is the difficulty encountered in the transition from one institution to the next. A coordinated approach is possible whereby this vertical movement is not only feasible, it is desirable and urgently needed. Diversification must be provided while attention is given to the avoidance of over duplication of programs and facilities.

Even a cursory review of the needs of business and industry for trained personnel reveals an extremely wide range of occupations. This diverse need is at least equaled by the number of students who urgently need a program of education that will make them employable. For some, high school graduation will be the completion of their formal education. This is entirely appropriate if they are adequately prepared with an entry-level job skill. There is an increasing trend toward post-high vocational education. The greater Denver area residents could have the added advantages for total occupational education high school, community college and or through Metropolitan State College.

Colorado now has the opportunity to suggest to the nation a plan for a complete program of occupational education, by institutional function.

It is essential that a plan be developed to avoid undue duplication of facilities and programs, and to insure that any particular program is offered in that school in which it will best flourish.

When the need for a particular vocational or occupational program is needed, the following criteria should be applied to determine where it should be offered:

1. The level of the occupation in the continuum of education, by intellectual level, maturity factors, age of students, and the length of time required to prepare.
2. The type of program and where it most logically would best serve those who want it. (A mature adult would not avail himself of a program only available within a typical high school day program.)
3. Programs that are already offered, or developed should be completely utilized before they are duplicated.
4. Programs that could utilize facilities that have multiple uses (two or more occupational fields) should be assigned to the school with those facilities.
5. The "transferability" or acceptance of the program within the institution and between institutions. It is imperative that the three "levels" of institutions respect and recognize the contributions of the others.
6. Faculty are a major ingredient in the success of any program. The faculty currently available within institutions, and their preparation and competence may dictate where a program should be located. Highly qualified faculty in some areas are very scarce.
7. Accessibility of the programs to the students, by type of school, type of student, location of the school, cost, etc.
8. The length of time required by the student to complete his preparation, and his age level.

9. Size of the school enrollment as it relates to the programs. A program may require a large student population because it only attracts a very small percentage of students. The more specialized the program, the more important this becomes because there must be enough students to warrant faculty, facilities, and instructional programs.
10. The amount, nature and diversity of related instruction available. Complex programs rely heavily upon inter-discipline offerings, such as social science, humanities, business, technical, sales, and manipulative.
11. Concurrent objectives of students. Often, part-time students want to upgrade themselves and at the same time pursue a degree program.
12. Programs that contain a significant need for field experience, on-the-job training, and real-life settings should be located in that school where this can best be done.

INSTITUTIONAL ROLE

To achieve maximum return on Colorado's investment is occupational education the function of each institution must be identified and fully utilized. In providing vocational education, each level from high school to the four year college has an identifiable role.

IMPLEMENTATION

Following this analysis of the occupational education needs and the available institutions, a plan is needed to bring this proposal to fruition.

The needs of young people are so great, and the employment opportunities so immediate that a priority must be established. The cluster of occupations concept should be applied. From these groupings the most critical needs, the serving of the largest numbers of students, and those most easily initiated in each institution should be identified.

Immediate steps should be taken to establish a coordinating council of staff personnel from the public schools, the Denver Community College, and Metropolitan State College.

RECOMMENDATIONS

It is recommended that the coordinating council for occupational education address itself to the following topics first, followed by the development of an overall master plan for occupational education for the metropolitan Denver area.

1. The development of a plan for the Denver Community College with close coordination with Metropolitan State College. With the three years of "lead time"

provided by Metropolitan State College in those fields where they have curricula, there exists a unique and highly desirable condition for a coordinated inter-institutional concept. This is, perhaps, the greatest asset Colorado has for a truly complete and comprehensive program. Metropolitan State College's expressed desire to formulate a "total" approach to occupational education has had wide acceptance by individuals within junior colleges in the state. It is hoped that the Colorado Commission on Higher Education will approve the two-plus-two proposal.

2. Provide for the development of a technical preparation curriculum in the area high schools. The "Tech Prep" program, analogous to college-prep would provide prestige to the program and the students. It would remove much of the stigma attached to the "old" concept of vocational education.

   By expanding the realm of influence of the industrial arts programs in the high school, a more comprehensive industrial education approach would evolve. In the ninth and tenth grades, students on a one-hour a day, five days a week basis would examine selected occupational fields. They could measure their interest, aptitude and skill in a laboratory setting. In the eleventh and twelfth grades, a two-hour day, ten hours a week program in a "family of occupations" approach should be made available. Some excellent guidelines for this approach are available.

3. Vertical articulation, or the planning of a sequence of programs, high school, junior college, four-year college, has always presented complications and frustrations for students. Here again, Colorado can "show the way" to the nation.

   Certainly, both the Community College and Metropolitan State College should provide for example, for advanced placement in a drafting program for those students coming to them from a high school "Tech Prep" drafting program. Likewise, Metropolitan State College should accept the two-year career student of the Denver Community College and enable him to receive recognition for this two years of college work.

   Metropolitan State College has, in fact, developed a two-plus-two program that has been strongly supported by junior college leaders in the state."

3. ED 018 215. A State Master Plan for Vocational Education. Ruhig, Theodore F. and others. Hawaii State Board of Education, Hawaii University Board of Regents, Hawaii State Legislature (Senate)--all of Honolulu, Hawaii. February, 1968. 125 pages.

"This proposal for an articulated and coordinated statewide vocational education program in Hawaii provides for the designation of the Regents of the University as the Board of Vocational Education, with a subordinate coordinating council. The major effort in vocational education should be at the level of the community college, which should emphasize program flexibility in offering short term programs, smaller course units, special summer programs, evening courses, on the job and cooperative training, and programs of advanced placement and early admission for high school students. Vocational education at the secondary level should be exploratory, directed at clusters of jobs, and an integral part of general education. At the community college level, general education should be an integral part of vocational education. Cooperative planning, articulation, and coordination should result in preparation of students for progress to successive levels of competence, elemination of unnecessary repetition at any level, and maintenance of availability of options for continuing education. (WO)"

4. ED 031 584. A Study of Education for the Distributive Occupations With Implications for Better Articulation of High School and Community College Programs in Connecticut. Malsbary, Dean R. and Holmes, Samuel F., Jr.. Connecticut State Department of Education; Hartford Division of Vocational Education; University of Connecticut at Storrs; Department of Higher, Technical, and Adult Education. May, 1969. 111 pages.

"A brief overview of high school and community college programs for distributive occupations is presented, along with a discussion of the general problem of articulation and coordination of competencies that should be developed at the secondary and post secondary levels. A discussion of the scope and development of distribution precedes the definition and discussion of several competency models. One author, in presenting a conceptual framework for distributive curriculums, identified four areas of necessarily broad competencies: marketing, social, basic skill, and technological competencies. Data for the study were obtained by questionnaires submitted to secondary and post secondary distributive educators to identify desired competencies and levels of proficiency, that is, mastery or acquaintance. Findings of the study indicate that the transition from the secondary level of distributive education to the post secondary level is in need of considerably more coordination. One basis for this conclusion was the finding that for 12 basic competencies, the high school required a mastery level of proficiency, while the community college required only an acquaintance level. A 70-item bibliography of books, periodicals, and theses is appended. (CH)"

5. ED 018 185. Articulation of Occupational Education in Clackamas County. Mikalson, Roy G. and Bloomquist, G. R.. Clackamas Community College, Oregon City, Oregon. October, 1967. 80 pages.

"Articulation of high school and community college occupational programs in Clackamas County was studied from aspects of guidance exploratory prevocational courses, and vocational courses. Sources of data were interviews with school personnel and employers, plus information in several earlier studies of the area's employment patterns and needs. Duplication and overlapping of programs indicated the need for a continuing process of articulation and coordination. Vocational programs at each level should be organized around job clusters. In courses which are given at both levels, standardization of content was needed. Cooperative efforts were needed to eliminate costly duplication or gaps between programs. Suggested programs for the college and high school were listed. The recommendations emphasized the need for further study and workshops. (WO)"

6. ED 017 232. Articulation is an Opportunity. Kintzer, Frederick C.. California. April, 1967. 5 pages.

"The right to establish standards for the bachelor's degree in California has long been the responsibility of the senior institutions. Although they have a high regard for the work of the junior college, they fear that course content may diminish because of the great demands on the junior institutions. They have confidence in the university-wide office of relations with schools, which submits proposed courses to the university's Director of Admissions to decide if they are university-equivalent or otherwise appropriate for a degree. This process, while slow, does work and transfer problems have not been great. Under the tripartite system of higher education, however, the junior college feels it should have more voice, especially insofar as the present system curtails innovation and experiment. The articulation conference informally oversees the transfer process and, although it works well, the decision has still not been left to the junior college. This area of tension appears to be lessening through increased conference and communication. Articulation in certain subject fields and several agreements between the university and the junior college have been worked out in this manner, with more approaching conclusion. It is felt that more universal agreements in general education transfers can now be developed. This article is a reprint from the "Junior College Journal," Volume 37, Number 7, April 1967. (HH)"

7. ED 012 582. Technical Education in Michigan Community Colleges -- Current Status of Collegiate Technical Programs, and Feasibility of Pre-Technical Curriculums in High Schools. Harris, Norman C. and Yencso, William R.. University of Michigan, School of Education, Ann Arbor, Michigan. March, 1965. 146 pages.

"To determine optimum high school preparation for students aspiring to college-level, industrially oriented, technical programs and the extent to which high school guidance services are acquainting students with careers in semiprofessional and technical occupations, questionnaires were mailed to counselors of selected high schools and to community colleges. Replies indicated need for better college publicity through visitation programs and press releases, and better counseling service and scholarship assistance. High schools could enhance industrial department status, provide career seminars, and improve counselor-pupil ratios. A summary of findings from 1,637 technical enrollees in 1963 showed that only 10 percent of the high school graduates enrolled for full-time study in occupational-centered programs. Reasons given for low enrollment were (1) inadequate vocational guidance (30 percent), (2) lack of interest (62 percent), and (3) lack of career information (60 percent). Poor guidance articulation between high school and college counselors, instructors, or technical program directors was indicated. Eighty percent of community college respondents felt the following "pretechnical" high school courses were important -- English, Algebra, Geometry, Drafting, Trigonometry, Physics, Basic Shop, and Social Studies. (DE)"

8. ED 016 469. Cooperation Between Two-Year and Four-Year Colleges. Blocker, Clyde E. (President, Harrisburg Area Community College, Harrisburg, Pennsylvania). April, 1966. 6 pages.

"Growing attention to articulation among junior and senior colleges has resulted from the increased number of colleges, recognition of problems of transfer students, and enrollment pressures at all levels of higher education. Effective articulation requires widespread knowledge about transfer students, based upon research data. Although "transfer shock" occurs, junior college students are generally successful after transfer to senior institutions. Definition of roles and characteristics of institutions will help students to choose appropriately. Although the 2-year and 4-year colleges and the universities have certain overlapping functions, roles can be clearly delineated. Changes in course content necessitate careful articulation in insure continuity of program. Instructional personnel qualified for junior college teaching must be prepared in senior institutions, which must carefully examine their programs in terms of personnel supply and demand in junior colleges. This article is published in "School and Society," Volume 94, Number 2277, April 16, 1966. (WO)"

9. Building Junior College Curricula on High School Programs. Beckes, Isaac K.. (President, Vincennes University, Vincennes, Indiana). "The North Central Association Quarterly," Volume 43, Number 4, pages 348-352. 1969.

Specific quotations from selected portions of this article follow.

"This presentation gives consideration to the articulation of high school and junior college curricula in three areas: developmental, general, and vocational-technical education.

Theories of Personal Development

William Boyer and Paul Walsh of the College of Education of the University of Hawaii, published an article in the October 19, 1968 issue of *Saturday Review* in which they declared: "There are at least three ability models which can be supported by current evidence. Each is based on different assumptions about human nature and therefore provides a basis for different social philosophies and different conceptions of government and education.

"The first model assume a great variety of innate ability and a high level of intellectual demand on the average person. In this model, there are hereditary geniuses and idiots, while most people have an intellectual capacity about equal to the demands of their society.

"The second model assumes that the innate ability potential of everyone (who has not been injured pre-or postnatally) is equal and far exceeds the normal demand level. (The actual opportunities a person has may produce differential performance similar to model No. 1.)

"The third model assume the possibility of some variation, but since all of the ability potential is well beyond the normal demand level, the variation makes virtually no operational difference."

They summarize their conclusions by saying, "Lacking definitive scientific evidence about human potentialities, social policy should be based on moral considerations. We should base our policy on the most generous and promising assumptions about human nature rather than the most niggardly and pessimistic. Men will do their best only when they assume they are capable."

The High School's Contribution

In other words, the basic problem of developmental education rests not in the area of content, but in the area of personal competency. If either of the two last models suggested by the professors from the University of Hawaii are correct, our problem is not basic ability but personal performance. The problem centers in motivation, discipline, dependability, consistency of interests, and the ability of the student to evaluate his own capacities.

General Education

The second area which has been assigned to me is that of general education. In our discussions with vocational-technical people, and sometimes with leaders of industry, our arguments about the needs of general education are played down because it is said that the high school provides general education and that the college only continues more of the same, and more of the same is unnecessary. It may be worthy of consideration for us to review whether such a charge is true or has enough validity to be taken seriously.

There are many answers when we asked the question of "what is general education, and what is it for?" General education should bring to the student's development such things as personal enrichment; skill in the use of symbolic systems; understanding of the broad issues confronting society; some knowledge of the basic ideas which have dominated human development; so far as possible, some appreciation for the beautiful; and reverence for the mysteries of life. To say that very deep insight in all these things can be had on the basis of a few hours of junior college education or even a baccalaureate education is, of course, ridiculous. About all that can be done is to open up these areas to make the student aware of the problems, teach him how to continue his study, and encourage him to do so.

If we assume that secondary education provides basic insight into the development of human society, appreciation for the literary and artistic interests of the human family, and basic skill in the utilization of the symbolic systems when the student comes to the junior college, there may well be something of a fork in the road in regard to the emphases of general education. If he is heading for a baccalaureate or graduate degree, it may be entirely in order for him to continue the study of social science, the humanities, and science and mathematics in depth, on the assumption that there will be enough time and opportunity to go more deeply into these areas.

On the other hand, if the student is a terminal student, it may very well be asked whether U. S. History taught in the same way it is taught in high school, only in more detail, is desirable: or whether biology taught very much in the same pattern as it is taught in high school, but again with more intensity, serves the need of the student.

Vocational-Technical Articulation

The area of articulation by the high school and junior college so far as vocational-technical education is concerned, is apt to be one which will stimulate considerable discussion. Many high schools have for generations had strong ongoing vocational programs which made a real contribution in fitting their graduates for jobs in particular industries in their communities. The articulation problem here is one of determining what each institution can do best, or what kind of programs in each will meet the needs of the citizenry.

In the beginning it may very well be suggested as has been indicated before, that industrial arts as it is taught in many high schools, may be the means of holding the interest on the part of the student, so that he completes his high school education. In other words, to continue his interest in industrial arts, he puts up with and performs well enough to pass in the more academic subjects.

It is quite obvious that in some communities where certain industries are highly developed and there is close coordination between the secondary school and the industry's interests, that much contribution can be made in providing vocational programs that will prepare young people specifically to enter such industry.

The chief criticism which seems to be arising, however, of vocational education in the high school, is not a reflection on that education, but upon the maturity of the student. The Kansas City study indicates quite clearly the viewpoint of a substantial group of employers to the effect that high school students at the age of 17 are too immature for permanent employment. Increasingly, companies hesitate to hire high school students for positions involving skill development. Providing experience for a year and then having the student discover he doesn't like the area at all results in the company's wasting time and money without getting an employee.

Norman Harris has said that by the mid-1970's, a high school diploma will not be looked upon as an acceptance certificate by employers, and that an associate degree or its equivalent, will be accepted in the same manner as the high school diploma today. Furthermore, it is quite obvious that few high schools are in position to provide technical education of the quality necessary for numerous positions.

Technical education remains essentially a post-high school operation.

On the other hand, realizing that high schools vary considerably with the kind and quality of vocational education they provide, community junior colleges taking students, say from an electronics program in high school to an electronics program in college, do the student an injustice when they asked him to repeat work he has already successfully completed. Far more attention needs to be given to the welfare of his development so as to keep him a growing person and not bore him with the repetition of activities as has been so often characteristic in some of the academic subjects, such as chemistry and mathematics.

In the light of present trends, it would appear that the secondary school wanting to make a contribution in the vocational field will place heavy emphasis upon the development of skill and the utilization of the symbolic systems of English, mathematics, and science, even to the extent of making special effort to provide remedial or developmental experiences to help the student.

In a discussion of top management of a number of companies a few days ago, the viewpoint was expressed and received wide agreement that in many instances the basic need - so far as the company is concerned - rests in language skills, mathematics skills, and science skills, rather than the manipulative skills of the vocational areas. Furthermore, in the light of the present development, it would seem that the high level skills must come with post-high school education where more maturity and dependability will support that type of education. The role of the high school will, in the future, become more and more preparatory, except for those who will not further their education, and in this instance, the high school vocational program should be developed toward the semi-skilled jobs, the pre-occupational and pre-technical courses, with special attention upon applied math, applied English, and the emphasis upon those personal qualities which make for individual competency."

10. Bridging the Gap -- High School to Community College. Smith, Albert K. (Miami-Dade Junior College, Miami, Florida). "Junior College Journal," Volume 40, Number 5, pages 33-36. February, 1970.

The entire article is quoted.

"As open-door educational institutions come into being at the rate of more than one each week, the complexion of student bodies in higher education changes measurably. The great heterogeneity in culture and in educational background presents a real challenge to academia. Instructors find stereotyping virtually impossible. The need to know and to understand students becomes more critical. Counselors together with teaching faculty must have "eyeball" contact with students on an individual basis.

Community colleges, large and small - especially the large urban campuses - will have difficulty employing sufficient counselors to give students the individual attention they need. Means must be sought whereby intimate contact with students can be maintained.

When Miami-Dade Junior College in Florida opened its second urban campus, Robert McCabe, chief administrator for the campus, permitted the author, then dean of student personnel services, to initiate an academic advisement program involving the total faculty and administrative staff. Today, nearly 300 staff members yield personal assistance in planning students' programs of study aimed at their particular educational objectives. Each faculty member interviews an average of thirty-five advisees during his office hours throughout each term.

The population of the second campus nearing 10,000 students and the staff exhibiting a critical shortage of counselors to interview incoming students resulted in the development of satellite high school counseling centers. The centers proved to be an effective and economical instrument for identifying potential students. The operating of high school centers could become an integral part of the admissions procedures for processing all incoming freshmen who graduate from area secondary schools.

Need for Articulation

During the past three years, it became apparent that a large number of high school graduates were transferring to the junior college either undecided as to their educational goals or unaware as to what their selected programs of study entailed. Many young men and women came to the college totally unprepared to enroll in the required courses of their chosen program. A survey taken by the Miami office of the Florida State Employment Service revealed an increased number of high school graduates who had no plans for additional education. Many of these students' test scores indicated probable success in college. It was questionable whether high school counselors had time to search out the student who had no definite plans for college. The high school counselor's and teacher's knowledge of the students' past performance could greatly assist in identifying individuals who could be expected to succeed in college. Even though the community college had an obligation of familiarizing the adult community, young and old, of the availability of course and program offerings, large numbers of students in academic difficulty on campus precluded using the staff for admissions counseling. As the gap seemed to be widening between high school and college, a model was sought that would accommodate large groups of potential students.

Approaching the end of the fiscal year with funds nearly depleted, the author requested and secured permission from the college and from the county school system to create high school counseling centers. These centers were conceived as an arm of college admissions counseling. The primary objective of the centers was that of identifying students in the high schools or adults in the school neighborhood who could benefit from additional study at the community college.

The plan called for employing high school senior counselors on a part-time basis to work in their own offices during evening and weekend hours. During late spring 1968, counseling centers became operative at eight public high schools in the southern half of Dade County which comprised, in the main, the South Campus district. Each center was staffed with two high school counselors for one or two nights a week, dependent upon student demand. During May 1968, 500 students were processed through the centers. The program was expanded to include two Catholic schools. The counselors achieved nearly complete coverage among graduating seniors by canvassing homerooms for counseling appointments. Students and parents were invited to talk with the counselors as often as they desired. For in-depth information about specific programs of study, the students were invited to the campus to meet departmental representatives. When the demand warranted, instructional personnel visited the high school centers and talked at length with students.

Having high school counselors involved with the college program produced a level of understanding and a degree of cooperation heretofore inconceivable. To the staff of the center - which represents the high school by day and the college by night - discussing the program and activities at Miami-Dade Junior College became commonplace.

Staffing the Center

Each counseling center was staffed with one or two high school counselors and two student counselor aides who were selected by the college student personnel services. The professional counselors were selected by the college upon the recommendation of the high school principal.

Two Miami-Dade students were assigned to augment the professional staff. These students were selected on the basis of their previous semester's performance at the college. Wherever possible, representation was sought from each of the ten feeder schools. A college counselor assigned to the dean of students' office conducted an intensive training program for the student aides. For the most part, these aides were returning to the high schools from which they graduated or to the neighborhood in which they lived to assist in the identification of individuals who could benefit from college enrollment.

The peer relationship proved quite satisfactory. Students who came to the centers seeking information about the college received it firsthand from their peers. The student aides were able to act as receptionists - explaining various offerings of the college and answering numerous questions. In many instances, they were able to prepare the student's program and submit it to the professional counselor for approval. The counselors, with the assistance of the aide, could accommodate a large number of students and had sufficient time to discuss programs in depth with the students. The aides were paid as student assistants for their services in the centers and at the college.

In the future, centers will be staffed with high school counselors, one high school faculty member involved with either student activities or athletics, and student advisers. The addition of directors of activities or athletics will assist in developing rapport with certain high school students heretofore beyond the reach of counselors.

Staff Training

The operation started with a get-together luncheon for high school counselors and college student personnel staff. At this meeting, the objectives of the program were outlined, and arrangements were made for evening training sessions. The high school counselors and student advisers received intensive training one night a week for four weeks at the college guidance center. A member of the academic advisement staff served as coordinator and visited the centers weekly or more often if needed In-service training became a continual process.

Each high school had on its regular day-staff one or more counselors who had been previously employed during summer terms in the campus counseling center. During the period of summer employment, they became thoroughly familiar with the programs available at the junior college. These counselors served as valuable resource persons for the high school staff concerning articulation with the junior college.

The trained period was concluded prior to the Thanksgiving holidays. The centers were opened one week prior to Christmas vacation for a trial run. Beginning January 12 and continuing through May 30 (twenty weeks), each center operated on a schedule of three to six hours a week during the late afternoon or evening. During this time, more than 1,500 potential students visited the centers. Most of the applicants received assistance in preparing their applications, talked at length about the college, and were assisted by a counselor in planning their programs of study. Upon receipt of a complete set of records, the Office of Admissions mailed each student an appointment for advance registration; thus, his first visit at the college was for fall registration.

Conceivably, all incoming high school graduates presently enrolled in Dade County high schools can be processed through the high school centers. Having the test scores available in November of the senior year from the Florida Statewide Testing Program and having worked with these students for the past three years, the high school counselor can intelligently discuss college with the students. The college counselor cannot be acquainted with the student in one or two visits to the degree that the high school counselor knows him. By processing the incoming freshmen through the high school centers, the seventh semester interim transcript normally sent from the high school can be eliminated. The college, getting an advance picture of enrollment, can use the data collected from the high school centers for sound management practices. Classroom space and staffing can be projected more accurately. To accomplish the objective of the center, the public relations faculty member (director of activities or athletics) and the counselor can contact students through the homerooms, or through neighborhood, and by staffing college information booths at shopping centers and other neighborhood activities.

Counselors and student advisers will be available for appointments during specific hours. The student adviser's role will consist of answering questions about college, assisting in completing application, collecting demographic information on the applicants, and doing preliminary academic advising. The counselors will handle the more difficult cases and will supervise student advisers.

Florida Twelfth Grade Test scores (which are used for placement rather than screening) are available in the high schools. Florida high schools and junior colleges secure these test scores on computer tapes from the State Test Center at the University of Florida.

Future

In addition to the test score and the high school performance record, the Florida State Employment Service uses responses of high school students on "senior plan cards" to identify those who do not plan to attend college but whose test scores predict a measure of success. Lists are furnished to the student advisers who contact the individuals by writing letters and making phone calls to tell these young folks the community college story. In the future, the author hopes to see the centers expanded to give complete coverage to all high schools and neighborhoods in Metropolitan Dade County."

11. Coordinating Secondary and Post-Secondary Programs. Beach, T. O. (County Coordinator, Vocational-Technical Education, Yuma, Arizona). "The Agricultural Education Magazine," Volume 41, Number 8, page 195. February, 1969.

Specific quotations from selected portions of this article follow.

"It is recognized that for many years vocational education in agriculture has been presented to secondary school students in a very fine and efficient manner. It is also recognized that there are excellent programs of agriculture offered at the post-secondary level. But it should be recognized that there is need to coordinate these two programs of vocational education in agriculture so that they will complement each other.

Coordination of Programs

Since junior college programs are of recent vintage, the junior college should take steps to insure that its programs are planned around what is already offered. In doing this the junior college can plan programs that are aligned with other educational institutions already offering programs thereby allowing students to move through the educational system on a continuous basis without serious adjustment problems or loss of college credit. In many instances the programs of agriculture in junior colleges have been developed independently of those already being offered in the community.

Community Programs

The development of junior college agricultural education programs which will serve the needs and desires of all is such a vast and complex problem that agricultural educators can no longer rely entirely upon their limited knowledge and experience. Constant and widespread modification of agricultural occupationas in recent years has accentuated the need for a closer relationship between the junior college agricultural education programs and the community. As changes in agriculture programs become more pronounced and problems encountered in planning and revising agricultural education programs become increasingly complex, extensive use should be made of follow-up studies of recent graduates, cooperative work programs, job surveys and analysis and advisory committees composed of representatives from the junior college, secondary schools, and community. Frequent contacts with the community are necessary and should result in information relative to the nature and scope of agricultural education programs, the duration of the programs, and close liaison between the junior college and the agricultural organizations which employ the graduates.

Cooperative Planning

Agricultural education leaders at the various educational levels should hold frequent conferences to reach agreement on the proper sequence and placement of agricultural subjects. The articulation of junior college agriculture education programs with those offered by secondary schools and senior colleges and universities should result in the realinement of the junior college agriculture programs.

Junior colleges should maintain a close relationship not only to secondary schools and senior colleges but also to the community. The philosophy of junior college education encompasses the idea that its offerings should not exclude any significant or sizeable segments of the community and that they should bear a close relationship to the unique characteristics of the local community.

Some Suggestions

I offer the following suggestions for improving the articulation of secondary and post-secondary programs in agricultural education.

- Inclusion of high school teachers in advisory committees.

- Increased visitation between high school and college faculties.

- Summer workshops offering an opportunity for college and high school faculties to work together.

- Establishment of joint curriculum committees in each of the technical fields.

- Specialized courses offered by the college to assist teachers in professional and academic advancement."

12. Progress and Status of Articulation Between Two- and Four-Year Institutions in California. Burger, O. J. (Dean, School of Agricultural Sciences, Fresno State College, Fresno, California). "The Journal of the National Association of Colleges and Teachers of Agriculture (NACTA)," Volume 15, Number 3, pages 43-44. September, 1970.

The entire article is quoted.

"There is a very simple answer to the question: what is the progress and status of articulation between the two- and four-year institutions in the State of California? The answer is that both the progress and status are very good even though the educational system in California is huge and quite complex.

Let me briefly touch on the size and complexity of the educational system in general and that part of the system related more importantly to agricultural instruction.

The total number of institutions in California, by level of education, is as follows:

High schools	1,477
Community colleges	92
State colleges	19
University campuses	10
Private 4-year colleges	51

The number of educational institutions that award baccalaureate degrees is 80. There are, however, more than 170 institutions of higher learning located in the State of California.

The total number of institutions by category that offer some kind of agricultural instructional program is as follows:

High School	277
Community colleges	36
State colleges	4
University of California	3

Within each of the seven regions of California there are several high schools and community colleges that offer agricultural programs. They are, by regions, as follows:

Region	Institutions with High School	Agriculture Programs Community Colleges
North Coast	24	6
South Coast	31	1
Superior (north)	42	6
Central	43	4
San Joaquin Valley	45	5
Southern	39	6
Southwestern	53	8
	277	36

You will agree that effective articulation between and among institutions in such great numbers is somewhat of a challenge. Yet, my predecessor at Fresno State College, Lloyd Dowler, past president of NACTA, and his colleagues in the state college and university system have developed very close relationships which have facilitated articulation.

Since about 80 per cent of the approximately 600 undergraduate students in agriculture at Fresno State College are transfers from community colleges, it is essential that very close relationships prevail and, moreover, that such relationships continue to be cultivated and strengthened.

Effective articulation is accomplished by personal visitation to the community colleges. Ofttimes the agriculture faculty of the community colleges visit with us in the School of Agricultural Sciences at Fresno State College. In addition, they frequently bring interested students with them. Through prior communications, personal interviews are arranged with specific faculty members who represent areas of the prospective students' interests.

During such visitations the faculty members of our respective institutions compare notes about the material covered in matching courses. In addition, the complete listing of courses offered at our respective institutions is reviewed and articulation agreements are formulated.

In fact, teachers of agriculture in high schools, community colleges and state colleges have held meetings to study how effective transition may be effected for students going from high schools to community colleges to state colleges.

The liaison or articulation between and among institutions has been aided considerably by and through the Articulation Conference in California. The Articulation Conference is the name given to the semi-annual meetings of those standing committees of the California Association of Secondary School Administrators, the California Junior College Association, the California State Colleges, and the University of California appointed to confer with one another for the continuing improvement of articulation among the segments of public education and for the achievement of fuller mutual understandings. The State Department of Education is a participating agent.

The names of the committees making up the Articulation Conference are: The Affiliations Committee (high schools), the Junior College Committee on Relations with Other Schools, the State College Committee on Coordination (state colleges), and the University's Committee on Affiliations with Secondary Schools, Junior College Conference Committee, and Committee on Coordination with State Colleges.

Although the Articulation Conference has existed as a quadripartite conference since 1944, two of its constituent committees have been functioning for many years more: the High School-University Committee on Affiliations since 1919 (except 1927-30) and the Junior College-University Conference Committee since 1932.

The Liaison Committee on Agriculture and Natural Resources (until the spring of 1970 this was known as the Liaison Committee on Agriculture) is one of several subcommittees of the Articulation Conference. In addition to the Liaison Committee on Agriculture and Natural Resources there are also liaison committees for....

Business Administration, Northern Section
Business Administration, Southern Section
Creative Arts

Engineering
English Foreign Language
Foreign Students
Letters and Science
Mathematics
Natural Sciences
Nursing Education
Ad Hoc Committee on Childhood Education

The Administrative Committee of the Articulation Conference is composed of representatives from high schools, community colleges, state colleges, universities, the Coordinating Council for Higher Education (a council established by the California State Legislature to coordinate the programs in the above institutions), a representative from the State Department of Education, and a consultant who is a representative of the California Community Colleges.

Although the membership of the Administrative Committee is different from that of the Articulation Conference, the chairman and secretary are common to both.

The Liaison Committee on Agriculture and Natural Resources is composed of representatives from community colleges, state colleges, the University of California, the State Department of Education, and the consultant of the California Community Colleges as well. This liaison committee meets at least once in the fall and once in the spring of each year.

Prior to 1960, the state colleges were not included officially in the Liaison Committee on Agriculture. The minutes of the February 20, 1960, meeting reveal the following interesting statement:

"Members present decided to request the Articulation Conference to make the Agricultural Liaison Committee a tri-partite committee with representation from the junior colleges, state colleges, and the University. The unofficial attendance of the state college representatives has been most valuable and the difficult times ahead make it imperative that these representatives have an official voice in the committee deliberations."

As you can imagine, the agenda of the liaison committee meetings covered problems and opportunities familiar to all of us. Curriculum patterns, articulation, quality and quantity of students, relevancy of programs, entrance requirements, limited admissions, the future of the Industry of Agriculture, and hundreds of other items were given considerable attention.

One of the most significant developments of the efforts of the Liaison Committee on Agriculture was the successful funding by the U. S. Office of Education of a quarter-of-a-million-dollar study of the agricultural occupations in California. By July or August 1970, there should be a report of this project. The occupational study was composed of interviews conducted in ten California counties. Questionnaires were mailed to every agribusiness firm in all ten counties that had more than fifty employees. There have been nearly 5,000 individual interviews and 1,700 firms have been covered.

The report should.....

1) identify and describe jobs, by level of education, available in California agribusiness;

2) determine the number of jobs in the state related to agriculture; and

3) present views of the leaders in the Industry of Agriculture.

The following paragraph appears in a progress report of the study:

"Contrary to some opinions, employee problems of health, absenteeism, accidents, and insurance were of relatively little concern. Even employee turnover seemed not important. The things that are worrying the growers and agribusiness leaders are all functions of education; time to train workers, lack of good trainers, the need to train and the lack of qualified workers were most important by far."

Another development which relates to the Liaison Committee on Agriculture and Natural Resources is a study of higher education in agriculture in California. The Coordinating Council for Higher Education (CCHE), through an advisory committee, engaged Dr. George A. Gries, Dean, College of Arts and Sciences, Oklahoma State University, as a consultant to study higher education in agriculture in California. Dr. Gries has visited many community colleges, state colleges and universities that offer agricultural programs. At least a preliminary report of this study will be made this fall.

In summary, the articulation between and among institutions that offer agricultural programs is continuing. Every effort is being made to cultivate even closer relationships than the fine relationships which prevail. As all of you are well aware, this is a human relations, public relations "kind of thing." It demands the best from all of us in order to present the highest quality educational opportunities to prepare young men and women for an even greater and more dynamic and, yes, ever more challenging Industry of Agriculture."

WHAT IS A STUDENT?

A STUDENT is the most important person in our institution.
A STUDENT is not an interruption of our work—he is the purpose of it.
A STUDENT is a necessary part of our business—he is not an outsider.
A STUDENT is not a cold statistic—he is a flesh-and-blood human being, with feelings and emotions like yours and mine.
A STUDENT is a person who brings us his needs—it is our privilege to fill those needs.
A STUDENT is deserving of our most courteous and attentive treatment.
A STUDENT is a full partner in our effort to cultivate wisdom through knowledge.
A STUDENT is the life blood of this and every educational institution.

Adapted from the inside front cover of the 1970-1971 Catalogue Issue of the College of the Albemarle.